

**University of Groningen**

## **Three Stories on Learning Analytics Show How Far Institutions Can Go With Data**

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P. 10

## Interview:

A New Era for Persons with Disabilities - Dr. Paul Harpur

P. 34

## Customer Snapshot:

How a Community College Saves Up to \$300,000 per Semester Through Student Retention

P. 46

## Roundtable:

Three Stories on Learning Analytics Show How Far Institutions Can Go With Data



Driving  
Continuous  
Improvement  
with  
**EDUCATION  
INSIGHT**

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## From the Editor

IN TODAY'S EDUCATION LANDSCAPE, THE LEARNING management system (LMS) on its own is now simply not enough. At Blackboard, we are more committed than ever to supporting education institutions globally tackle their biggest challenges. As a result, we are busy building a comprehensive, digital learning environment, which we believe is the key to moving education and student success forward.

For the first half of the year, we focused on how Blackboard helps education institutions solve key challenges through academic effectiveness and learner engagement. Now, we shift our focus to another pivotal topic: Education Insight.

**By delivering education insight, Blackboard can help institutions boost student retention rates, create inclusive and accessible learning for all students, increase student success, and promote educational integrity.**

Student retention is a topic of focus for all most higher education institutions today. Explore how Lewis & Clark Community College, in Godfrey, Illinois, has increased retention rates by close to 15% and has saved the college over US \$700,000 in tuition revenue.

When it comes to student success, we've found there is no one formula to achieving results. As different universities have shown us, there are multiple ways to tackle this area of academia, and many institutions are using learning analytics

to attain results. Consider how three distinct universities around the globe are using learning analytics in unique ways to boost student success.

Guest columnist Eric Kunnen, associate director of eLearning and Emerging Technologies at Grand Valley State University, provides a comprehensive view of GVSU's approach to student retention and success, including the role that technology and faculty can play to boost student engagement and attain results.

Over the past couple of months, we've had the privilege of sitting down with education leaders from diverse institutions and hear their stories. For instance, during this year's Global Accessibility Awareness Day, which took place on May 17<sup>th</sup>, 2018, we had the opportunity to speak with five universities about accessibility in education. Thank you to the University of Queensland, the University of Derby, the University of Cincinnati, Instituto Profesional IPLACEX, and Universidad Andres Bello for their generous insights. We hope their experiences can help you shape or improve your own accessibility strategy.

We are thrilled to share this issue with you and hope that you gather numerous ideas that you can implement within your organization. Thank you to all who took part in the making of this edition, and as always, we welcome your feedback and stories for the benefit of the entire educational community.

Sincerely,  
The E-Learn Team



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Table of Contents

Education Insight / June 2018

Bringing People Together:  
The Secret to UC's  
Accessibility Success .....4

A New Era for Persons  
with Disabilities: An Interview  
with Dr. Paul Harpur .....10

An Ally to Support Inclusive Learning  
at the University of Derby.....16

Increasing Access to Higher  
Education in Latin America.....20

Accessibility as a Pillar for  
Promoting Equal Opportunities  
in Educational Processes .....24

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SPECIAL TOPIC

Inspiring Continuous Improvement  
with Education Insight..... 28

How a Community College Saves Up to \$300,000  
per Semester Through Student Retention ..... 34

How a Predictive Model Enhanced Ulster  
University's Approach to Student Retention..... 38

Six Drop Out Causes and Solutions to  
Keep Higher Ed Students in School.....42

Three Stories on Learning Analytics Show  
How Far Institutions Can Go With Data ..... 46

What Instructor and Student Behavior  
Can Tell Us About the Best Teaching  
and Learning Strategies ..... 52

Keeping Students Engaged:  
the Role of Faculty in Student Retention .....58

E-Learn Cartoon ..... 64



# BRINGING PEOPLE TOGETHER: The Secret to UC's Accessibility Success

“Start small,” says a banner on the University of Cincinnati Accessibility Network website. By clicking on the banner, a new page opens up with detailed instructions on how faculty and staff members can start making their electronic files, digital course content, websites, software and applications accessible.

BY: PRISCILA ZIGUNOVAS  
CINCINNATI, OHIO, UNITED STATES



“YOU MAY BE WONDERING—WHERE DO I START? WE ENCOURAGE you to begin with one technique, like using headings, and learn how to incorporate that into all your materials. This will start you in the right direction for making content for a broad range of learning styles,” says the introduction on the page.

The University of Cincinnati, founded in 1819, is committed to providing students with an accessible electronic experience that supports their success.

In the Accessibility Network website, everything can be easily found within a few clicks: guidelines, checklists, tips and best practices, and the university’s accessibility

policy. In addition, an eAccessibility introductory course is available in Blackboard Learn for faculty and staff members.

**“This is a wonderful generation of students that are coming to college right now. They are activists, they speak out, they know what their rights are.** Campuses need to be aware that students will make their expectations clear and we need to be ready to meet those expectations. This is at the core of our values, especially as a public institution,” notes Heidi Pettyjohn, UC’s EIT accessibility coordinator.

## A Fresh Approach to Accessibility

UC’s current approach to accessibility began to be implemented over two years ago. According to Pettyjohn, it can be defined by three words: proactive, integrated and accountable.

“We have created 18 full-time positions in our university across four units: IT, University Communications, Academic Affairs and Student Affairs. In creating those positions, we were trying to integrate accessibility into the practice

of offices, as opposed to thinking of it as something that is done only by a few, or only in special circumstances. So, by doing that, we have been able to incorporate accessibility into processes and procedures,” Pettyjohn explains.

One example of that is the university’s Central Purchasing Department, which has embraced the need to learn about accessibility and was able to incorporate it into existing and required purchasing processes.

UC’s Blackboard Learn ecosystem, called Canopy, was refreshed with the launch of several new features that could help create more interactive and engaging experiences





for the students. In order to do that, the university invited instructors and designers who were interested in being early adopters and help build a digital learning environment that was student-centric from the start.

Accessibility Network

At that time, according to Dave Rathbun, instructional technologist at UC, there were several faculty and staff members on campus already working on accessibility and Universal Design for Learning within their colleges and programs. The evolution has come in developing a support network across the institution and incorporating influential faculty members that have a big impact on their colleagues.

“We brought together everyone on campus who was supporting these projects, from Purchasing to IT, faculty and staff who interacted with students day to day, and put them together in a partnership where we shared information and best practices, and we thought about the challenges that we were facing,” Rathbun explains.

According to Rathbun, this “bottom-up, top-down” approach, having support and enthusiasm from faculty and staff, along with decision-makers, has been the key to the success of this initiative.

“We are actively working to raise awareness and then put that plan into action. **There are a lot of great people working very hard. The Accessibility Network has connected us all, and together we can make profound, powerful, institutional-wide changes,**” he says.

These institutional-wide changes can be difficult to implement in a university as large as UC, with more than 44,000 students. To Pettyjohn, communication, coordination and agreeing on priorities are significant challenges.

“Another big challenge, and I think it is a universal one, is how overwhelming accessibility can be when you first dive into it,” she

says. The way they found to help people take part in this huge change of culture is to break it down into pieces that are more manageable (think back to the start small strategy).

Rathbun explains that the Accessibility Network, in partnership with UC’s LMS System Administrators, conducted a comprehensive accessibility review of course content and determined what the 12 most used tools were using information gleaned from Blackboard’s Activity Accumulator.

“With a baseline established, the team could identify and address significant accessibility concerns and track the progress of accessibility improvements within the LMS,” says Rathbun.

The Network also collaboratively developed a self-paced Blackboard training course called “eAccessibility: An Introduction,” which was heavily focused on awareness and initially deployed

to more than 7,000 faculty and staff members who publish content within the LMS or to the university’s web presence.

“With the second iteration of this course, we have shifts from awareness to empowerment, equipping faculty and staff with the knowledge and resources to create accessible content from the start,” says Rathbun. The updated course has been deployed to nearly 12,000 users and has enjoyed the support of the Accessibility Network’s executive sponsors.

Implementing Blackboard Ally

UC piloted Blackboard Ally during Spring Semester 2018 with 25 faculty members and instructional designers participating. “This semester-long pilot was an overwhelming success. A comparison of courses from Spring Semester 2017 and 2018 showed marked improvement, with an overall increase of 20% in the levels of accessibility across all courses,” says Rathbun.

UC’s lead Accessibility Instructional Designer, Megan Wuebker, coordinated training between Blackboard, faculty and

### Why Should Accessibility Be a Strategic Priority for Institutions?



**HEIDI PETTYJOHN**  
EIT ACCESSIBILITY COORDINATOR AT  
THE UNIVERSITY OF CINCINNATI

“Accessibility can be considered both a strategic priority and a strategic pathway toward other priorities. An accessible campus environment is something that we have to provide. It is a civil right to our students, faculty and staff, potential students, guests, and visitors. Accessibility also improves the student experience; It can be a key strategy in increasing equity and inclusion commitments on campus, and it promotes students’ commitment to the institution. So, I think that it is a value added to the institution, both as a means to other ends and as an end in itself.”



**DAVE RATHBUN**  
INSTRUCTIONAL TECHNOLOGIST AT  
THE UNIVERSITY OF CINCINNATI

“Inclusive education enhances learning outcomes for all students, not just those with disabilities. This can be illustrated by closed-captioning, which benefits all students by improving attention, vocabulary, and comprehension, hence creating a better learning experience regardless of one’s abilities. Addressing the needs of students is our legal obligation, and it’s the right thing to do. By doing so, we address the needs of all learners.”

PHOTOS: AFP David Kohl



instructional designers, and met with the pilot participants throughout the semester to gather feedback on the tool.

“Overall, our faculty were very happy with it. **The biggest win Blackboard Ally gave us is that, in the process of fixing existing documents, faculty reported that they actually learned enough about accessibility that they’ve now begun to create new documents for courses to be accessible,**” adds Pettyjohn.

Supporting Faculty

To help faculty and students make use of all the resources that are provided by the university, different support mechanisms are offered.

“Instructional technologists and designers from the Center for Excellence in eLearning, in collaboration with the Center for the Enhancement of Teaching and Learning, regularly partner with instructors from all of our colleges to provide support and guidance. One example of this partnership is Open Consultation Days,

professional development events offering faculty opportunities to receive advice on technology resources, course accessibility, and strategies for improving teaching and learning on a walk-in basis. These one-on-one consultations help faculty members ensure that their materials are pedagogically sound and appeal to students of all learning needs and types. These partnerships have become key to the way we support faculty in an institution this large, with so many disciplines and colleges,” says Rathbun.

To Pettyjohn, what makes the difference is getting people to care enough to invest the time to do it. “We help people understand that this is about student success, that **a student with a disability simply expects to be able to sit down and do their work with their peers. That is not an unreasonable expectation, and we remind people that our number one obligation is teaching and learning.** We help people understand that students with

disabilities are not the problem, that students’ assistive technology is not the problem; The problem is in the barriers that we have built and that we must get out of the way so our students will be able to achieve success,” she notes. “We had an overwhelming support from our faculty, staff and administrators on campus as we framed what we are doing in that light.”

When it comes to students having an inclusive experience, according to Pettyjohn, one role for faculty is responding to requests for accommodation for students with declared needs.

“Our Accessibility Resources Office received additional staff through our Network funding, and they are our first line of defense in ensuring students have access to course content when they have declared needs,” she explains.

Another role for faculty, which is becoming more and more important, is learning to create their content in a way that makes it as accessible as possible from the start. This can be done, for example, by applying Universal Design for Learning (UDL) principles to course content.

“Sometimes this will eliminate the need for accommodation, but most often it creates a partnership between faculty and our Accessibility Resources Office to make sure that, when a student with a disability finds a barrier, we remediate it and, ideally, that they do not run into any barriers,” Pettyjohn says.

It is important to keep in mind that many students do not declare such needs, sometimes because they are not aware that they must do so, and in other cases, because disorders such as dyslexia or attention-deficit/hyperactivity disorder (ADHD) can be left undiagnosed.

Sharing Excellence

In 2018, the University of Cincinnati was awarded the 2018 Blackboard Catalyst Award for Inclusive Education. The award recognizes and honors innovation and excellence in the Blackboard global community of practice. Heidi Pettyjohn and Dave Rathbun have shared their experience with accessibility in a number of presentations, including sessions in BB World and the Global Accessibility Awareness Day.



“I was one of those students, many years ago, who did not declare a need despite having a learning disability since I was in elementary school. I am also an Army combat veteran with all sorts of needs related to my service. It never occurred to me to say that to anyone,” says Rathbun.

He also notes that the way UC courses have been designed in the past could create obstacles for students. The university, however, accepted the challenge to change that scenario.

**“Our faculty — at least every member I have ever met — has a passion to share their knowledge with their students. If we can provide instructors with the tools to do so in a way that works for everyone, I believe that we are better as an institution and better as a society,”** concludes Rathbun.

### Learning from the University of Cincinnati

**START SMALL**

Implementing an accessibility plan is a massive effort that can be overwhelming. Break your strategy into smaller, manageable pieces

**BUILD A NETWORK**

Bring together people who believe in the project and are enthusiastic about it

**“NOTHING FOR US WITHOUT US”**

Students with disabilities must be a part of the process





# A New Era for Persons with Disabilities:

AN INTERVIEW WITH  
DR. PAUL HARPUR

Less than 10% of all published works in developed countries are made into accessible formats. In developing countries, the situation is even worse: less than 1% of books are accessible.<sup>3</sup> Because of this, millions of people are being denied access to books and other printed materials. How does this affect their education?

BY: PRISCILA ZIGUNOVAS AND PAUL HARPUR  
BRISBANE, AUSTRALIA

IN HIS MOST RECENT BOOK, “DISCRIMINATION, Copyright and Equality: Opening the E-Book for the Print Disabled,” Dr. Paul Harpur, senior lecturer at TC Beirne School of Law at the University of Queensland, analyses the interaction between anti-discrimination and copyright laws and its effect on people with disabilities in their capacity to access print content.

Harpur has published extensively in the areas of employment, disability rights, anti-discrimination



Paul Harpur  
Senior Lecturer  
at University of  
Queensland

PHOTO: Image courtesy of The University of Queensland

## GLOBAL ACCESSIBILITY AWARENESS DAY

To Dr. Paul Harpur, there are several reasons, beyond legal requirements, for universities to make accessibility a priority. One of them is the economic argument:

“Accessible universities help people move from welfare to being economic actors in the community.”



and human rights laws. He has a PhD in workplace relations and employment law and has been appointed an International Distinguished Fellow with the Burton Blatt Institute, from Syracuse University, in New York. He is also a former elite athlete who competed in several international competitions, including the 2000 and 2004 Paralympics Games.

In Harpur’s opinion, the United Nations Convention on the Rights of Persons with Disabilities (see box) has started a new disability politics which is essentially a new era in how society views and includes people with disabilities. “**Moving forward, I think we are experiencing a paradigm shift which will have far reaching consequences for inclusion, and technology providers have the opportunity to be at the forefront of enabling society for all uses.**”

In this interview, he shares his thoughts on accessibility and education.

**E-LEARN: Dr. Harpur, could you share with us a little about your personal history with accessibility and how did that influence your work?**

**DR. PAUL HARPUR:** I was hit by a train when I was 14 years old and I lost my eyesight. So, I went from being able to read standard books and use the computer using eyesight, to suddenly waking up and having to try and get used to using adaptive technology and other alternative means to access the written word. This was a significant challenge because, back in 1993, technology was significantly less advanced. We did not have, for example, e-books (I don’t think they even existed), the Internet was non-existent, at least where I lived, and that was really hard. So, throughout my studies, the advances in technology have made a difference and for me, now working, some of the

things I use with Blackboard Learn go so far that I would say are exceptionally enabling. Exceptionally enabling is the capacity to have students submit material electronically, so I get my students to upload the assignments in Word into Blackboard Learn and I can click on a “download all” function, download them all to my computer, mark them all and upload and read comments. We have only abolished paper handing and paper assignments relatively recently and, for me, when I started teaching, that was always one of my concerns: how would I mark term papers? But the capacity to upload papers has made a huge difference because I do not have to ask for significant adjustments in my workplace. The students upload their papers and I just mark them and they get the marks, which is very, as I said, exceptionally enabling.

**E.L: Reflecting on your own teaching and learning experiences, how do you think inclusive technology has evolved in the past few decades and how have online learning and new technologies contributed to this scenario?**

**DR.P.H: New technologies can be enabling and disabling depending on how they are designed.** I always think there are two components to any technological advance or change. With any technology change, you have the way of treating the design itself but also the user. So, if there’s a change in, say, Blackboard Learn, and if it’s going to take me a week to learn it, my general approach will be to do my best not to have to learn it, because I don’t have the time. Any change, when you talk about it being disabling or enabling, if users are really advanced with their adaptive technology and it is going to take a long time [to learn how to use a new one], do they have someone who will train them on the change? Or, do they have the time to attend the training? If it is to be used for their workplace, will their employer give reduced workloads to enable participating in such training?

But, one of the things that work well is online teaching. It’s really good for academics that have mobility impairments. I was talking to an academic earlier this week who has a substantial mobility and fatigue impairment, which results in them being unable to attend campus regularly, but because a lot of what they do is online they can work on their material while at home, in bed, and even



in one example while at the hospital. Everyone in Australia has 10 days of sick leave paid per year and once that's gone you can use unpaid leave, but if you take a lot of leave you will not keep your job; even though it is a right to take personal leave. That person, if it wasn't for online teaching, would be unemployed. So, they have gone from unemployment to employment just because of technology advances.



**E.L: Awareness is the first step towards offering students a truly inclusive and accessible learning experience. Why should educational institutions consider accessibility a strategic priority?**

**DR.P.H:** There are obviously big moral and legal reasons. Australia, United States, Canada, New Zealand, United Kingdom, Ireland, and most of Europe, all have reasonably robust anti-discrimination laws. And in countries where that is not a requirement, then you can advertise accessibility as an above compliance—a measure which does not cost the purchaser any more. In terms of the university, I think it is important, particularly for the state funded or state supported universities, if you can train someone, get someone into a job, rather than being at welfare, then this individual goes from being an economic cost on society to becoming an economic contributor and tax payer. From my example, I am totally blind; my brain is fine, but

**Persons with print disabilities depend on accessible e-books to be able to read print content. Dr. Paul Harpur, senior lecturer at University of Queensland, talks about that and more.**

I can't do a lot of jobs. So, I am a lawyer. I go from having to rely on government support, to being out and contributing to society financially. I think a university has, as a state funded body, an obligation to help students, and that is beyond legal requirements, beyond the Convention on the Rights of Persons with Disabilities, which does impose standards. There's an obligation added on article 24 to universities that are recipients of state funding. I talked about that in a paper I wrote with a colleague of mine from Harvard, Michael Stein, which is under submission acceptance with Northeastern University Law Review, about universities as change agents under the Convention on the Rights of Persons with Disabilities. And then there's also the economic argument that if the state is getting the universities to be accessible, it helps people move from welfare to being economic actors in the community.



**E.L: When it comes to accessibility, institutions historically have been reactive to laws, avoiding penalties, or to student complaints. Would you say there is an opportunity for institutions to start considering accessibility from the start when designing their courses and systems?**

**DR.P.H:** If you consider a university and who purchases any product, for example, there are many different people who make the purchase – from a centralized procurement team to faculty members—and everyone uses the equipment in different ways, which can also create problems. Having accessibility filtered through every stage is challenging and it is something that we are trying to fix, but when the United Nations Convention looks at Universal Design, it recognizes that there will be a lot of situations where a design does not include everyone and you'll have to make a reasonable accommodation. We try to become more proactive, but there's always going to be a large reacting component to it. **There will always be some issues, but the idea is to try to minimize them so, at every stage of that process, someone does not have to negotiate their access and their impairment.** If every day you have to take time away from studying and work, if you have an impairment, you usually might have to work harder already, so anything added on top of that is a significant burden. Not to mention the daily emotional labor of negotiating a disabling world with all its prejudices.



**E.L: How can professors and instructors create an inclusive learning experience for their students even when they are dealing with limitations such as a lack of resources?**

**DR.P.H:** It is exceptionally challenging for a professor to be inclusive if the university and the school don't support that. If you are a professor from a university with a thousand students, you are already busy. And if there are five or 10 students that need extra help, if you do not have support from someone in the university, it is very hard. All universities in Australia, and most around the world, have a disability office to help students with disabilities and to provide some support to academics. The level of support, however, is substantially restrained by resource limitations.

The best way to introduce universal design into university and teaching, I think, is having the system set up so academics and others do not need to think to make it inclusive. So, documents like PowerPoint presentations have templates which are already inclusive and features, for example, like Blackboard Ally are activated on all sites, with the result being automatically sent to a disability advisor. So, if there are problems, the disability advisor says, "there's going to be barriers here", so as the PowerPoints go up there, it is immediately notified and they can take action really quickly. Another thing is, the system should be designed so the professor doesn't create problems: the room is accessible when they book it, the space is accessible. Basically, the person teaching does not have to think about being inclusive because the system makes it as inclusive as possible.



**E.L: Your most recent book analyzes the interaction between discrimination and copyright laws and how these laws affect people with disabilities in their**

## Marrakesh Treaty

The main goal of the Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired, or Otherwise Print Disabled (adopted in 2013 and in force since 2016) is to create a set of mandatory limitations and exceptions for the benefit of people with such disabilities.<sup>2</sup> The global "book famine" is addressed in the Treaty in two ways:

- The Treaty enables authorized entities, such as blind persons' organizations and libraries, to more easily reproduce works into accessible formats for non-profit distribution.<sup>3</sup>
- It also permits authorized entities to share accessible books and other printed materials with other authorized entities from different countries.<sup>3</sup>

**capacity to read print content. Could you explain this issue to us and what kind of barriers does it create?**


**DR.P.H:** Standard books can't be read by people who have print disabilities. If you have a mobility impairment and you can't hold a book, if you have a vision impairment and you can't read the screen, or if you have a cognitive impairment where you can't read because you have dyslexia... Now, you have e-books, there are tens of millions of them, and it's no longer necessary to do anything to these books because they are born digital. But copyright holders don't want to lose their financial investment and there are some key texts that make millions a year, so they do not want their books to be out and downloaded for free. So, there's a tension there between people who want to read it, because they can't read any other format, and people wanting to exercise copyright to make profits. Some of the issues are around digital rights management systems, which reduce the capacity to copy and the capacity of the user to engage with the book in certain ways. Unfortunately, the outcome is that it stops people's screen readers adaptive technology to be able to use that technology over that book, so if you can't read the screen and you need to listen to the screen with a screen reader, you can't access that book as the system blocks it, and that is one of the main tensions. There's a strong pressure to keep copyright and not to give access. It's changing now, the Marrakesh Treaty (see box) has shifted the International Law towards access. Most of the e-book publishers are now realizing that if they don't provide access, then people





will just strip the protections off anyway. Hopefully this issue will slowly go away, or at least the barriers to access. It is a big issue especially in poor countries, like India, because the people who are most in need of access can't afford the databases.

 **E.L:** Is it possible to protect copyright and facilitate access to content at the same time? How?


 **DR.P.H:** The publishing houses themselves are finding ways to distribute their materials in ways that are profitable but usable by everyone, so that's helping. A lot of the publishing houses work with charities, like Bookshare in the United States, for example, and give access and use the existing framework. We used to get Braille books and books on cassette tape to enable them to get access to digital versions. Those charities have been exceptionally robust in protecting copyright because they have a very strong interest in the continual flow [of books], so, they want to try to avoid people distributing. That is one way it is working very well. Essentially, the publishers give access to the charities and the charities do their policing, and they do a


### Convention on the Rights of Persons with Disabilities


Adopted in 2016 and in force since 2008, the United Nations Convention on the Rights of Persons with Disabilities has the purpose to "promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity." The Convention was ratified by 177 countries and has 8 guiding principles:


|   |   |
|---|---|
| 1. Respect for inherent dignity, individual autonomy including the freedom to make one's own choices, and independence of persons | disabilities as part of human diversity and humanity  |
| 2. Non-discrimination   | 5. Equality of opportunity  |
| 3. Full and effective participation and inclusion in society  | 6. Accessibility  |
| 4. Respect for difference and acceptance of persons with  | 7. Equality between men and women   |
|   | 8. Respect for the evolving capacities of children with disabilities and respect for the right of children with disabilities to preserve their identities |


very good job because they want to keep the flow coming and everyone is winning. **More and more e-books are being born and published in accessible formats now so it is becoming an amazing environment for learning, research and teaching.** Realistically, if someone wants to breach copyright it is very easy as it is not hard to get an e-book for anyone. Most digital rights management you can strip all the protections off it in a very short order anyway, so putting them there seems a waste of time.


 **E.L:** What do you think is the role of universities in providing equal access to books and other learning materials?

 **DR.P.H:** Universities are in an exceptionally powerful position and they can use their market share to tell the publishers that if they do not provide access, the institutions won't be using their products. Indeed, that is some of the litigation in the United States: there was one settlement about a software package that wasn't accessible and the student sued, and they had a settlement which was made public, and the software provider was required to either make it accessible within the time frame or the university would no longer use products by that company. You might think, "well, that's got to mean students miss out," but most books are published on several platforms, so the platform that isn't accessible will lose business. There have also been a few examples where people have stopped using technology. The Kindle, for example, was fully accessible and then they got pressured by corporate holders to limit access and became inaccessible, so Arizona University no longer used the Kindle. The Kindle quickly realized that they were losing market share and made an accessible version for the education sector. If they didn't, they were going to lose a lot of money very quickly.

 **E.L:** How do you think higher education institutions can contribute to helping persons with disabilities transition from university into the workforce?

 **DR.P.H:** I think this is exceptionally vital to students who have impairments, because, if you have come from K-12, you have a lot of support from the educational system, and then you get to university and there's a bit less, but when you get to the workforce there's not less, there's basically none. In Australia, we have a full court and a federal court that say you have a right to access education, but there's no equivalent of that in the workforce, so you don't have a right to *access work*, you have a right to *work*, but it's not the same thing, there's a significant difference. So, you are on your own. Here, at the university, as an employee and as a blind person, I can access some of the support if I need it, but I have to act on my own behalf—I have to know how I can operate, I have to know what supports I need and how to get them. So, all the things that a disability advisor would do for a student, professionals need to do for themselves after graduation. They need to know who to ask for help and how to ask for it, because most employers don't have those resources. If you are at a job interview, you need to be able to convince the perspective employer how you will operate and get up to full speed quickly and cheaply. For example, when I went for a job with the government, I found out what was the system they were using and what were the databases, I would try to find a bit of information out before I went to the job interview, so I could say, "well, I know how to use your system already, no troubles at all." So, it's difficult and challenging, and students are not helped or trained to do that. We are essentially giving them a degree that they are not going to be able to use because they will not get a job. **Universities can help students with disabilities by retaining professionals with disabilities to mentor them and creating spaces where students with disabilities can network and share experiences.** Universities are also sites of research and development, and they can accordingly research into how persons with disabilities are operating through education and work and find strategies to help realize the dream of ability equality.

 **E.L:** What trends do you see developing now that should define inclusive education in the upcoming decades?

 **DR.P.H:** In terms of developments in technology, I would say instructional materials for education, because everything is going into tablets and computers, which means that the providers of those computers and their systems are making them accessible and usable—usable for everyone—and that could be easier for us. I suppose the bottom challenge will be, if those systems are expensive, it might create a financial barrier for people, but for people with disabilities, if they are able to use the same technology as everyone, then it will be cheaper than disability-inclusive specialized material. When I was in high school, I had to buy a "talking laptop" essentially, and that was maybe about AUS \$4,000. This was back in the 1990s. But these days I can get a laptop for a quarter of that price, or probably even less than that.

I think the Convention on the Rights of Persons with Disabilities has started a new disability politics, which is essentially a new era in how society views us and includes people with disabilities. So, moving forward, I think we are in this shift where we will have far-reaching consequences for inclusion, and technology providers have the opportunity to be at the forefront of enabling society for all uses.

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# An Ally to Support Inclusive Learning

AT THE UNIVERSITY OF DERBY

At the University of Derby, an institution in Central England with over 17,000 students enrolled in over 300 programs of study, an initiative was created in 2015 to provide staff and faculty with the foundation they needed to exercise inclusive practice.



Claire Gardener  
Senior Learning Technologist  
at University of Derby

PHOTO: AFP Oli Scarff

GLOBAL  
ACCESSIBILITY  
AWARENESS DAY

Rated Gold by England's Teaching Excellence Framework (TEF), the University of Derby wants to ensure their students benefit from an excellent experience and develop the attributes needed to thrive in their future employment or study. In order to meet these goals for all learners, accessibility is the key.



BY: PRISCILA ZIGUNOVAS  
DERBY, UNITED KINGDOM

THE INCLUSIVE DERBY INITIATIVE WAS established after changes to the Disabled Students Allowance (DSA) caused learners to no longer receive government funding to help them with disability-related costs, such as buying specialist equipment or hiring helpers.

The initiative brought together a working group in order to raise awareness and promote inclusive practice in the university.

**“The biggest challenge we face is to bring about a cultural shift where inclusive practice becomes embedded in everyday activities, and that people across the university (teaching and professional support) see the value and purpose in understanding the importance of inclusivity and putting it into action,” says Claire Gardener, senior learning technologist at University of Derby.**

The group was made up of staff in the academic areas and other professional services throughout the institution, such as teaching and learning, student well-being, technology enhanced learning, marketing, library and IT services.

## Accessibility Audit

One of the group's actions was to fund an accessibility audit, which assessed not only the institution's physical campuses, but also the digital spaces of the university, such as their digital learning environment and website.

The audit detected some positive aspects as well as others in need of improvement. Regarding

the university's digital environment, the audit identified problems with the institutional website, which didn't meet all the required standards. It also detected that content in the digital learning environment was not consistently accessible.

With those results in hand, Derby gathered funding to implement tools that would help them deliver a more accessible learning and teaching experience online.

ATBar, a tool bar that allows users to customize their browser navigation, such as adjusting font size and color, and ReadSpeaker, a text-to-speech tool which reads the content on the screen, were deployed institution-wide.

They have also implemented Blackboard Ally, an accessibility solution that has already been adopted by over 300 institutions worldwide.

## Understanding Blackboard Ally

Blackboard Ally can be integrated with different learning management systems, such as Blackboard Learn and Moodle rooms. It has three main functions:

- 1

Blackboard Ally automatically checks all content uploaded to the digital learning environment for accessibility issues and generates alternative accessible formats using advanced machine learning algorithms. These formats include OCR and tagged PDFs, HTML, ePub, audio and electronic braille.
- 2

Provides instructor-specific feedback, which guides instructors on how to improve the accessibility of their course content and helps them alter future behavior.
- 3

Provides institution-wide reporting on course content accessibility, which helps universities make informed decisions and track their progress.



## Automating Steps in the Way to Accessibility

The implementation of Blackboard Ally at Derby was done in record time. According to Gardener, they decided to implement the solution in December 2017, when they had the opportunity to upgrade their Blackboard Learn system to the 9.1 Q4 2017 version.

Derby has initially deployed Blackboard Ally within 10 modules on their test server. After some testing and exploring of how the solution integrated into the digital learning environment, they decided to implement it across the university. By the end of January 2018, the solution was fully live.

“We were in a position to implement Blackboard Ally quite quickly as we had a whole host of pre-existing resources around inclusive practice. Today, every single program and module area has Ally, and we’ve also applied the solution across our system going back on our historic data. We made that decision so that we could spot trends in how our accessibility is improving,” Gardener explains.

### Why should educational institutions consider accessibility a priority?

“The following was extracted from our TEF submission document:

‘The University of Derby has a long-established commitment to providing high quality learning and teaching as part of an excellent student experience for all learners, with our commitment to transformational learning captured in the University’s strapline: ‘Great people, original thinking, inspiring individuals... changing lives.’ The focus is on ensuring that all Derby students benefit from the full range of experiences and activities delivered within the University, enabling them to develop the graduate attributes needed to thrive in their future employment or study.’

Claire Gardener,  
Senior Learning  
Technologist  
at University  
of Derby

Accessibility must be a priority if we are to meet these goals for all our learners.”

The day Ally was launched, Gardener was expecting the phone to be ringing non-stop, since faculty would suddenly be faced with red indicators throughout their course content, due to the possible accessibility issues.

“I’m pleased to say that we only got one phone call that day,” says Gardener.

### The communication strategy with staff and faculty members was a key factor to the success of the Blackboard Ally implementation at Derby.

“I think the narrative we used was incredibly important. When Ally is implemented, all of a sudden you get all this wealth of data about how accessible your system is, and the accessibility rating of every individual piece of uploaded content. That can be quite overwhelming,” she explains.

The team went on to create a clear messaging strategy to contextualize the purpose and goals of Ally to staff and faculty members, and to explain how they were expected to engage with the solution. Email communications to faculty also emphasized that Ally indicators were only visible to them.

In addition, staff and faculty were provided with a point of contact at the Technology Enhanced Learning office, and Ally help guides were added to the university’s Digital Practice Handbook.

“We were very clear that what we were asking staff was not to update everything, but to start considering the materials they were currently updating, and thinking about all future materials and how they could make those more inclusive. We weren’t asking them to go and review everything, because that would have been a non-starter,” says Gardener.

## The Results

Four months after the Blackboard Ally implementation, Derby’s overall accessibility score increased by 4%, and it is now at 46%.

Gardener says she was pleasantly surprised with these results, particularly after the accessibility audit highlighted digital course content as an area for improvement.

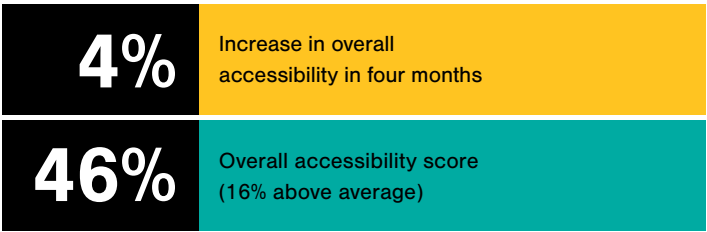
Since providing faculty with advice on how to improve their course materials is an integral part of Blackboard Ally, Gardener expects to see a steady increase in the future. She is also interested to see, in the next few month or years, how other institutions using Blackboard Ally compare to Derby.

“I am also interested to talk to colleagues about what an optimal accessibility score might be, particularly given the complex nature of the digital learning environment and the types of materials that are uploaded,” Gardener says.

For Derby, Blackboard Ally was a way of starting a conversation and raising awareness about the value of accessible, alternative formats to student success. The tool is also helping inform the accessibility strategy across the university, as well as to benchmark their progress.

“I still feel that we are in the early stages of it,” says Gardener. “But in conclusion, we’ve had a rapid roll out of Blackboard Ally because we have essentially decided that the risks of the technology and implementation were low and, overnight, the accessibility of our course content improved massively for our students.”

### Results After Blackboard Ally Implementation



## 3 Lessons from the Inclusive Derby Initiative

### 1. Inclusive Practice Must Be Embedded into Institutional Strategies

Derby realized that for inclusive practice to be a reality across the university, it needed to be an integral part of the institutional strategies. They started looking at different areas of the institution ensuring that their strategies had inclusive practice embedded into them. Effectively supporting learners through the different transitions within higher education, and providing students with inclusive and authentic assessment are examples of that.

### 2. Faculty and Staff Should Know What They Are Expected to Do

Faculty and staff members need to know what is expected of them so they can prepare and act accordingly, without being overwhelmed. Before the launch of Blackboard Ally at Derby, lecturers were specifically told that they weren’t expected to make all their course content accessible at once. Instead, they should focus on improving accessibility for current and future materials, and if they needed support, the Technology Enhanced Learning Team was there to help.

### 3. Faculty Need Support to Learn New Skills

To prepare staff and faculty for the new challenges, Derby promoted several development initiatives. For example, a “Using Technology for Inclusive Learning” workshop and an Ally specific workshop became available. However, there’s still a long way to go. With Blackboard Ally, it became apparent that academic staff may lack generic information communication technology (ICT) skills and assistive technology skills. How to address this and engage faculty to make sure they develop the skills they need is still an issue.





# INCREASING ACCESS TO Higher Education in Latin America

During Global Accessibility Awareness Day, held in May 17th, 2018, E-Learn had the opportunity of sitting down with IPLACEX, a Chilean institution that is committed to promoting access to higher education throughout Latin America. A region where, according to the World Bank, access to higher education for students between the ages 18 and 24 does not exceed 40%.<sup>1</sup>

BY: ROBERTO BARRIGA AND PRISCILA ZIGUNOVAS

SANTIAGO DE CHILE, CHILE

## Meet the Interviewee

● **Roberto Barriga Tapia**, academic vice-rector at IPLACEX, is a Civil Industrial Engineer with a minor in Computer Science from the 'Pontificia Universidad Catolica de Chile,' and has more than 20 years' experience in education, technology and social projects. He held various management positions at the 'Instituto Profesional DuocUC,' where he is most notably known for the creation

and development of the Information and Telecommunications School. He was also a board member of the ACTI AG (Chile's main IT industry association), supporting human capital strategies, and a member of the Technology Council for the Accrediting Agency of the College of Engineers, AcreditaCI.



**Roberto Barriga**  
Academic  
Vice-Rector  
at IPLACEX



**E-LEARN: Could you tell us a bit about your work at IPLACEX?**

● **ROBERTO BARRIGA:** One of my fundamental roles at the institution is to define the best practices and teaching-learning strategies that we can incorporate in order to improve, and guarantee, our students' successful learning. This is particularly relevant in the case of programs with a high degree of flexibility. IPLACEX is known for implementing programs that are flexible and accessible, and that is why most courses take place online; we also have blended and face-to-face programs. One of my main objectives is to make sure that curriculum and instructional developments take place, as well as the incorporation of technologies, which not only serve to improve educational conditions, but also to offer more enriching and unique learning experiences.



**E.L: Awareness is the first step to offering students access to enriching learning experiences. Why should educational institutions consider access as one of their strategic priorities?**

● **R.B:** The answer stems from a fundamental fact which greatly influences the Chilean higher education system and something that is, of course, evident in other places around the world. Formal learning systems are too rigid - very structured. The traditional concept that we have about a learning process is: to study a career at an institution with a



### GLOBAL ACCESSIBILITY AWARENESS DAY

Rigid formal learning systems exclude people from having access to higher education, especially in Latin America, where online learning is still being adopted by universities. To IPLACEX, providing accessibility and flexibility in their learning programs is a key strategy to broaden access to education.





face-to-face modality, with a series of modules that are related to prerequisite criteria, where if you fail a module you fall behind. Generally, units last a semester, where you either pass everything or nothing. In this context, the number of people that can access this type of learning structure is limited. If one looks at online higher education numbers, one realizes that it hasn't grown. In fact, it has decreased by a few percentage points, which means that everyone who can study in a traditional, rigid educational system is already studying. Nevertheless, the people that work, and that cannot access these rigid systems because they do not have the needed availability, are out. This is very important because if one takes a look at international studies about the training needs of working professionals (such as figures from developed countries), one realizes that Chile is well below the average.

**E.L:** How would you score access to education at higher education institutions in Latin America? What are the main challenges for this region?

In general, access is very limited. The traditional system prevails, mainly due to a face-to-face component and rigid curriculum structures, and with few alternative mechanisms that validate previous learning. Perhaps some countries are the exception, such as Brazil where distance learning is well established. But, in general, it is a slow incorporation process.

**E.L:** What is the general strategy for your training programs? What makes them unique?

**R.B:** The general strategy is to provide flexibility and accessibility. Access, when referring to a geographical component, is where we offer



virtual environments for learning. At the same time, when we talk about flexibility we refer to aspects such as asynchronous learning or supporting people who have previous experience or knowledge, whether it be informal, gained through experience in the workplace, or formal, obtained through degrees or certifications. These means of special admission are not the only ones we provide; there is also the possibility of organizing the programs according to the previous knowledge gained, allowing students to accelerate their study process.

**E.L:** What is the importance of having access to professional education? How has IPLACEX's focus on access evolved in the last few years?

**R.B:** Access to education must be analyzed at various levels. One level is related to the physical access to learning spaces. In this case, people that cannot travel certain distances or cannot physically come to the facilities must be taken into account. When one embarks on a project that deals with the importance of providing access (like a virtual approach or component of study), one is addressing several things such as traveling great distances for those that live far from urban centers, or mobility issues faced by people with physical disabilities.

Another level that is very important is the one that goes beyond physical means of access, and it's the one that is referred to as asynchrony. These learning processes are asynchronous, which means that learners do not have to connect at the same time to see their professor. Rather, every individual can log into the learning environments at their own time and pace and enjoy their experiences freely. Another point is that travel expenses are brought down to zero.

**E.L:** How does IPLACEX make the most of Blackboard tools and resources to fulfill its objective of improving access to education in Latin America?

**R.B:** We knew that we needed a digital learning environment such as Blackboard or Moodlerooms that would allow us to manage our students' virtual learning process. Now, throughout our experience we have identified that:

- We need a platform system that is robust.
- We must have the capacity to store all student interactions throughout their learning process.

- We need a platform where we can install and deploy various virtual learning experiences using different technologies.
- We must use the assessment tools that the platform offers for learning processes, not only to evaluate learning, but also to evaluate educational processes.
- We need to offer our students their own learning paths through adaptive schemes.

At IPLACEX, we have students with different learning backgrounds and styles, and we hope to offer them alternative paths for their learning process on the long term - all the way from the curriculum, to the assignments they must submit. This is precisely one of the flexible tools that Blackboard supports us with.

**E.L:** What trends do you think will define access to education in the next few years?

**R.B:** In terms of trends, we envision several things. The first point is related to generating mechanisms that enable the student to build their own learning schedule at the formative level, and with a certain degree of flexibility. This is going to slightly depend on their profile, their learning pace and learning style at the curricular and instructional level.

On the other hand, we are also evaluating flexible methodologies in order to offer different types of curriculum paths. This will allow students to develop their capabilities according to the industry they want to belong to.

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**ACCESSIBILITY AS A PILLAR FOR Promoting Equal Opportunities in Educational Processes**

BY: VERÓNICA ÁGUILA, PAOLA OLIVARES AND PRISCILA ZIGUNOVAS  
SANTIAGO DE CHILE, CHILE

**GLOBAL ACCESSIBILITY AWARENESS DAY**  
How can institutions offer a quality educational experience for a large and diverse group of students? At UNAB, offering varied and accessible study and professional development programs increases opportunities for individuals with different learning styles or who cannot access higher education in person.

**Paola Olivares Díaz**

**Verónica Águila Moenne**

## Meet the Interviewees:

**Verónica Águila Moenne** works as director of the Inclusive Education Office for the General Teaching Department in the Academic Vice-presidency, Universidad Nacional Andrés Bello (UNAB).

**Paola Olivares Díaz** is director (I) of Education Design, Development and Teaching at UNAB Online.

Although accessibility awareness is increasing, putting theory into practice may pose a big challenge for educational institutions. With the aim of better understanding some of the best practices involved in making education accessible for every student, E-Learn Magazine took advantage of Global Accessibility Awareness Day to talk to one of the most renowned universities in Latin America, Universidad Nacional Andrés Bello, in Chile, a member of the Laureate International Universities network.



**E-LEARN: Could you tell us a little bit about your work at UNAB?**

**VERÓNICA ÁGUILA:** Our work at UNAB is developed by the General Teaching Department at the Office for Inclusive Education, and is mainly focused on moving forward the creation of an inclusive community. As a team, we face challenges, including advancing the development of an inclusive culture that is set and evidenced through policies, processes and practices that respect and appraise diversity. In this context, accessibility in terms of infrastructure and information becomes an essential pillar of our work.

**PAOLA OLIVARES:** At UNAB Online, we are focused on the creation of online learning experiences for both undergraduate students - whose courses are based on a face-to-face modality - and professionals who wish to reinforce their

knowledge and professional development through fully online postgraduate courses.

With more than 6 years now of constant work learning how to design these experiences, and now along with the university's Office for Inclusive Education, we are moving forward towards a cross-sectional integration of inclusive thinking. This way, we are responding to the recognition and value of diversity, and making a sustainable contribution to content accessibility for all our users.

Integrating technologies into everyday life, together with the increasing connectivity and expansion in the supply of postgraduate courses, has positioned us as an ally favoring inclusion

from the perspective of providing education and development alternatives to those who, due to different reasons, such as geographic, health-related, etc., have not been able to access them. We should also remember that due to Chile's geography, many communities and people are far from educational centers in the country. From that perspective, online education is undoubtedly a significant contribution.



**E.L: Awareness is the first step toward providing students with a truly inclusive and accessible learning experience. Why should educational institutions consider accessibility one of its strategic priorities?**

**V.A:** Both accessibility and universal design become fundamental pillars regarding people's right to be fully involved in their studies, and are part of our mission as a university. Going in this direction will allow higher education institutions to meet the ethical requirements of providing equal opportunities for all. It is worth noting that

according to our legal framework, accessibility is "the condition to be met by environments, processes, goods, products and services, as well as objects or instruments, tools and devices, to be understandable, usable and practicable by all individuals, under safe and comfortable conditions and in the most autonomous and natural possible manner." (Art. 3, Law N°20,422). We are implementing this from a teaching standpoint, in both curricular design and teaching development processes.

**P.O: Firstly, higher education institutions should never treat their students as clients. We should recognize them more as diverse individuals with unique dreams, fears, and aspirations.** Secondly, higher education institutions should ask many questions before continuing to search for answers. One of the first questions to consider when talking about inclusion and accessibility is: How can we offer a quality educational experience for such a large and diverse group of students?

UNAB Online's contribution in this regard consists of promoting and projecting that, through the conscious use of technology, we can provide greater and better opportunities for personal and professional development. Certainly, having a robust online offering of diverse study and professional



development programs will expand opportunities for individuals who cannot access higher education in person, either due to geographic, employment, social, or health-related factors.

This is why we believe that, today, technology is a strategic ally not only for disabled people to access content and information, but also for all learners to feel recognized despite differences or challenges, which can be reflected through the various learning styles, academic records and admission profiles.

**E.L: How would you evaluate accessibility and inclusive education in higher education institutions in Latin America? Which are the main challenges in this region?**

**V.A:** We could say that significant progress has been made in the region in terms of conceiving education as a right, strongly driven by the different treaties and projects being developed in the region, as per the Virtual Higher Education – Latin America (ESVI-AL, in Spanish) treaty. According to the study “Web Accessibility: A Challenge for the Developers of Latin America (2017),” at least 45% of the countries in the region do not have specific policy in terms of web accessibility, which certainly is a big challenge. For the university, the challenge lies in preparing curriculums consistent with accessibility guidelines, and for graduates to understand that accessibility refers to much more than just mere infrastructure.

**P.O:** From an inclusive education perspective, one of the challenges faced by higher education institutions consists of contributing to reduce the barriers existing in our educational environments. In this regard, the work developed by UNAB has helped us identify the barriers that we have built over time so that we can bring them down.

In addition, through a direct link with each Academic Unit, UNAB Online has been able to understand with greater detail the troubles, necessities and opportunities of each school with regards to their students and offer help.

This is precisely the biggest challenge for the region: recognizing the particular political, social and economic

contexts in Latin America to ensure that the solutions offered through technology, become real, contextual and have local significance and impact. The next challenge is taking that local experience out to the world.

At this point, we could also ask ourselves the following question: how can we move from recognizing and appraising local experiences to a global academic context? This is precisely where technology plays an essential role for higher education institutions.

**E.L: What is UNAB’s approach regarding accessibility? How has it evolved over recent years?**

**V.A:** At UNAB, accessibility is an essential part of its inclusive education approach. This view has strongly evolved over recent years and is strongly associated with UNAB as we are a diverse institution, as well as reinforces our educational mission/offering. As an institution, we have progressively advanced toward inclusion processes through the work related to infrastructure, support and curricular adjustments for disabled students, the incorporation of accessibility and universal design criteria for graduating students, special admission for disabled students, as well as the consolidation and integration of accessibility into the institutional policy regarding inclusion.

**E.L: How does UNAB take advantage of the tools and resources offered by Blackboard to attain its goal of improving access to education in Latin America?**

**P.O:** Since beginning our work at UNAB Online, we have developed our institutional model, perfecting it with what we have learnt throughout these years. Along the way, we have rediscovered our LMS, and we have been slowly and progressively empowering ourselves with all its resources,

and have recognized that the use of tools positively contributes to both the global design of learning experiences and the capacity of analysis it provides to the institution’s management team.

With regard to platform adoption, we are in a learning process and are relying on Blackboard’s team to maximize their knowledge and experience. We expect that our courses will progressively meet the minimum accessibility standards that allow students and faculty to access information and the learning experience in the most simple and realistic manner.

**E.L: Which would you describe as the best accessibility practices at UNAB, which other institutions could draw on and learn from? Could you give us some examples?**

**P.O:** We are permanently learning and building from our own experiences as well as from our mistakes. **We are aware that integrating the inclusive approach does not begin or end by developing courses and adaptive resources, but it entails an institutional transformation that should start by questioning and raising issues in relation to our everyday practices, with the aim of establishing an inclusive culture.**

Therefore, just as we promote having insight in our practice, it has also been important knowing what other institutions have done, but never with the intention of making comparisons. It is clear to us that it is impossible to develop an inclusive view without the due respect and knowledge for each institution’s specific characteristics. Each one has its own story and has travelled its own road. However, each experience undoubtedly inspires us, guides and generates more ideas - that is, more opportunities. For example, recently an opportunity came up to work on accessibility in relation to the design

of our first MOOC, where we had the possibility to design accessible learning resources, in addition to using Blackboard Learn tools, directly on the Open Education platform.

This experience also trained us in the development of inclusive thinking and we applied the premise that “**designing with others in mind leads to the inclusion of all.**” Working on this MOOC design was different; many individuals were involved in the design, review and validation, among them a visually disabled student. With his feedback and diagnosis, our future designs will certainly favor accessibility even more. This is another example that reinforces the statement that producing work taking into account all needs and perspectives favors inclusion. We want to continue to work with many and to highlight the nuances of the educational environment in Chile and the region. And, yes, we want to work with disabled people, not only to comply with the rules, but also to consider usability criteria so that everybody feels invited to a fluid learning experience.

**E.L: Which trends do you see in this area that will define accessibility in the upcoming years?**

**V.A:** We believe that the challenge we have ahead is being able to include the criteria and perspective of accessibility into all of our processes, especially in the academic areas. We, at the General Teaching Department, are working to incorporate these criteria into curricular designs and redesigns, so that they can be developed as “understandable and usable elements available to all persons, under safe and comfortable conditions, in the most autonomous and natural manner possible,” as established in the national legal framework and in our own internal policy.

**P.O:** Technology will always be at the forefront and we will always find more and better technological solutions that favor accessibility. What motivates us is being aware of the trends that will make an impact in our processes, and to ensure that curricular and institutional designs are increasingly integrating inclusive thinking into the development of the academic experience. The worst that can happen in this advent of technological development is losing the ability to ask questions before assuming the use of cutting-edge technology. Asking ‘Why?’, ‘For what?’, ‘With whom?’ and ‘For whom?’ is important.





# DRIVING CONTINUOUS IMPROVEMENT WITH Education Insight

**“If you can’t measure it,  
you can’t improve it”**

**Peter Drucker**

BY: KATIE GALLAGHER

GRAPHIC SPECIAL: TRiIBU Studio

JUST OVER 20 YEARS AGO, BLACKBOARD SET OUT TO solve the most critical challenges of education institutions. Blackboard founders recognized the impact that the Internet could have on education around the globe and introduced a new technology into the marketplace- the learning management system (LMS). For the past two decades, Blackboard has helped education institutions around the globe take teaching and learning

online, define and shape best practices for digital learning, and support the entire student journey.

Twenty years ago, the greatest challenge on the horizon was taking teaching and learning online. Today, the LMS is simply not enough to solve the most critical challenges of education institutions. As we look to the future, we are focused on developing a comprehensive, digital learning

environment aimed at helping institutions to solve the core challenges faced today. To achieve this goal, instead of building our products separately and integrating them into the LMS, we are taking a much more holistic approach. Across Blackboard’s portfolio, we are striving to empower and help educators improve student success, increase retention rates, create inclusive and accessible learning experiences, and ensure educational integrity.

At E-Learn, we have explored how Blackboard helps solve these challenges through academic effectiveness and learner engagement. Now we will shift our focus to how Blackboard enables continuous improvement by providing an accurate and deep understanding of the teaching and learning process.

**Through education insight, Blackboard helps education institutions boost student retention rates, create inclusive and accessible learning for all students, increase student success, and promote educational integrity. To demonstrate how Blackboard helps institutions tackle their most critical challenges, let’s explore some real-world examples.**



# Boosting Student Retention Rates



Lewis & Clark Community College, a mid-sized community college in Godfrey, Illinois, has achieved remarkable results from their data-driven retention initiatives. Using Blackboard Analytics to identify student risk levels and informing the most effective strategies for supporting them, Lewis & Clark has pioneered an approach to student retention—an approach that has empowered the school to be more efficient, and helped students achieve their goals. As a result of these efforts, retention increased 13.8 percentage points from 58.7% to 72.5%. With this increased student retention rate, Lewis & Clark saved \$700,000 in tuition revenue. This effort has helped create a more data-drive culture throughout the college. If you'd like to learn more about Lewis & Clark's achievements, you can access the full case study¹.

Like Lewis & Clark, Concordia University–Wisconsin achieved stronger student retention with Blackboard Intelligence. In 2015, Concordia University – Wisconsin experienced a five percent drop in student retention with a retention rate of 71.6%. By providing academic advisors with dashboards that allow them to identify struggling students according to a large number of different factors, advisors were able to reach out with personalized interventions and direct students to the right support services on campus. As a

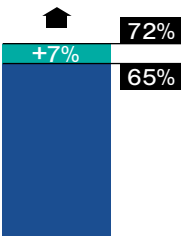
result, Concordia achieved a 10% increase in student retention to hit an institutional record of nearly 82%. Assistant Vice President for Academics for Student Success, Elizabeth Polzin, explained, “With the Blackboard learning analytics tools, this year has been a bit of an explosion for us. I think it’s one of the reasons we saw a big jump on our retention rate: we had the opportunity to provide personalized outreach before the semester was over. It’s a better use of time and human resources in general. As a supervisor, I prefer to not have my team spinning their wheels in a direction where they end up in a dead end. Using analytics gives us focus and direction as to the best way to serve our students.” To learn more about Concordia University – Wisconsin’s successes, read the full report².

And, finally, Central Piedmont Community College (CPCC) accomplished improved student retention rates as well. As the largest community college in the North Carolina Community College system, Central Piedmont serves over 70,000 students across six campuses. CPCC found it difficult to improve retention and completion rates and assemble and understand its data. It was a challenge to understand the dynamics of such a large, diverse student population. More than 50% of incoming students at CPCC needed academic remediation before even starting their programs: students are often the first in their families to go to college, and many must manage work and parenting, finding it difficult to balance these demands while studying at college level. CPCC wanted a way to make data-driven decisions and to use the data to take actions. The college implemented Blackboard Analytics with the goal of gaining better access to information and using that information to drive new

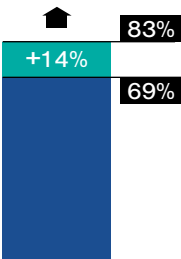
initiatives to improve student success and retention. Through their work, Central Piedmont Community College was awarded the “Leader College” distinction by Achieving the Dream; increased course completion rates from 65% to 72%; and increased term-to-term retention rate from 69% to 83%. This retention and analytics strategy is important because it helped the college to enroll and retain students and enable more of them to enter the workforce, as well as boost its financial position. Learn more about Central Piedmont’s retention and analytics strategy³.



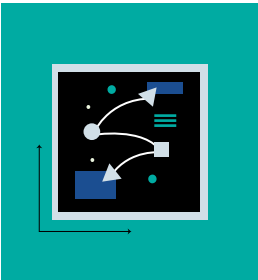
## Central Piedmont Community College course completion rate



## Central Piedmont Community College term-to-term retention rate



# Creating Inclusive and Accessible Learning for All Students



In 2004, California State University – Chico, often known as Chico State, began tackling the challenge of accessibility after the university released an executive order that established a policy on disability support and accommodations. Providing universal and accessible digital content was of the main challenges, as the volume of content being created by many different educators made it nearly impossible for the university to evaluate the accessibility of course content across the institution and to determine where improvements needed to be made. With six years of digital course data and 44 thousand digital courses, a manual solution to this problem was not scalable. Through technology, collaboration, manageable goals, strategic partnerships and executive level support, Chico State is overcoming those barriers to creating inclusive learning experiences and leading the way for the greater CSU system, the largest public university system in the United States. Chico State created a pilot program for Blackboard Ally with 11 faculty members. These faculty members used Ally to automatically check their course content for accessibility issues, create more accessible alternative versions of course content for students, obtain feedback on course content accessibility at the course level for instructors and at the institutional level for administrators to help track and improve accessibility across the institution. As a result of the pilot, Chico State faculty are empowered to deliver a more ►



inclusive learning experience and increased Ally accessibility scores by 30%. David Rowe, manager of Distributed Learning Technologies at California State University- Chico reflected, “We have done this within budget, under time, and ahead of expectations demonstrating that big projects and big goals can be accomplished.” Learn more<sup>4</sup>.

While Chico State has completed their pilot, Grand Valley State University (GVSU) is just getting started addressing accessibility and inclusive learning. At the start of this summer semester, Blackboard Ally will become available to all 1,800 faculty and 25,000 students. Through integration with GVSU’s Blackboard learning management system, Ally automatically scans course content that has been uploaded by faculty. A report is provided to faculty as well as guidance to resolve common accessibility issues. In addition, Ally automatically creates alternative files types for students, including: Enhanced Version, HTML Version, Audio Version, Electronic Braille, and ePub. “GVSU is committed to inclusive education, and I am focused on ensuring my courses are accessible,” said Cheryl Kautz, affiliate instructor in the School of Computing and Information Systems and 1st Place Award Winner of the Most Inclusive Classrooms in the United States. “Blackboard Ally will help me ensure that my courses are as accessible as possible for my students, save me time, and most importantly help faculty at GVSU to focus on improving student success.” To learn more about GVSU’s plans, check out their eLearning and Emerging Technologies<sup>5</sup> panel highlights.



California State University – Chico, challenge of accessibility

6 YEARS OF DIGITAL COURSE DATA

44,000 DIGITAL COURSES

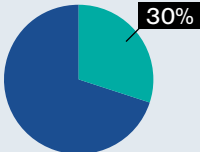
11 FACULTY MEMBERS



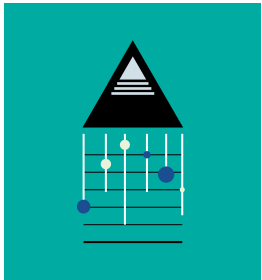
BLACKBOARD ALLYS



INCREASE IN ALLY ACCESSIBILITY SCORES



# Maximizing Student Success and Educational Integrity



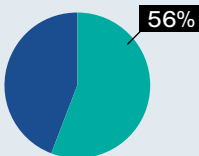
Between 2014 and 2016, online program enrollments at Indian River State College grew by 56% and yet student success rates lagged behind those of students taking the same courses in the face-to-face setting (with a difference of 7.5 percentage points in average grade). To solve this challenge, Indian River created a taskforce to study ways to better serve online students and to standardize instructional design across all sections of the same course. To do this, the team leveraged insights from Blackboard Analytics for Learn to discover ‘bright spots,’ high impact practices that could be scaled more broadly, and to identify at-risk students early in the semester and target interventions by professional advisors. As a result, Indian River increased online baccalaureate success rates by 11%. Additionally, they eliminated the achievement gap based on course modality (online vs. face-to-face).

To take their efforts further, Indian River is now piloting Blackboard Predict to further enhance their ability to identify and intervene with at-risk students earlier in the semester. Learn more about boosting student success and educational integrity at Indian River<sup>6</sup>.

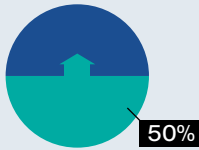
In addition to Indian River, Coppin State University boosted student success with Blackboard Intelligence. By putting student success data into the hands of everyone on campus, Coppin State University established a culture in which everyone from grounds keepers to the president’s office were aligned toward a common goal: serving the community by growing their freshman class. Coppin State University’s president became a catalyst for change, and was the greatest advocate of data democratization and the use of Blackboard Intelligence at the institution. The president successfully instilled a culture at Coppin State University that enforced that institutional decisions could not be made unless they are supported by data, especially when it comes to student success. Faculty and staff are now leveraging Blackboard Intelligence because they have confidence that the data is accurate, and has been provided by the entire institution. As a result of these efforts partnering with Blackboard, there was a 50% uplift in freshman enrollment following years of decline. By 2017, Coppin State saw a 20% increase in their graduation rate and is on track to see a similar increase this year. Learn more about the success at Coppin State<sup>7</sup>.



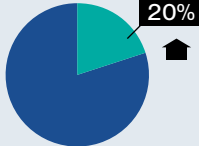
Indian River State College online growth on program enrollments between 2014 and 2016



Coppin State University uplift in freshman enrollment



Coppin State University graduation rate



SOURCES

1. Blackboard. Lewis & Clark Community College. <http://www.blackboard.com/resources/pdf/case%20study-student-lewis&clark.pdf#search=%22Lewis%20Clark%20Community%20College%22>
2. Blackboard. Concordia University – Wisconsin. <https://elearnmagazine.com/learning-analytics-higher-education/>
3. Blackboard. Central Piedmont Community College. <http://bbbb.blackboard.com/cpcc>
4. Blackboard. E-Learn. California State University- Chico. <https://elearnmagazine.com/technology-helped-chico-state-audtomate-way-accessibility/>
5. Grand Valley State University (GVSU). <https://gvsuelearn.wordpress.com/2018/03/27/gvsu-selects-blackboard-ally-to-support-inclusive-education/>
6. Blackboard. Indian River State College. <http://white-papers.blackboard.com/indian-rivers-state-college>
7. Blackboard. Coppin State University. <http://pages.blackboard.com/campaign/analytics/data-democratization-coppin-state.aspx>

As you can see, Blackboard successfully partners with education institutions to boost student retention rates, create inclusive and accessible learning for all students, increase student success, and promote educational integrity by providing powerful education insight.





# How a Community College Saves Up to \$300,000 per Semester

THROUGH STUDENT RETENTION

Dennis Krieb

Director of Institutional Research and Library Services at Lewis and Clark Community College

BY: PRISCILA ZIGUNOVAS

GODFREY, ILL., UNITED STATES

Student retention is a challenge for all higher education institutions, but community colleges might have an even harder time making students stay in school. As they are mostly open admissions institutions, they tend to have a higher number of at-risk students than institutions with a selective admissions process.

IN ADDITION, MANY COMMUNITY COLLEGE STUDENTS ARE first-generation, meaning they are the first in their families to ever attend college. “This means **community colleges must be very proactive in reaching out to their student populations and making sure those students are connected, that they are not left alone**, and that they have people outside the classroom who can help them,” says Dr. Dennis Krieb, director of institutional research and library services at Lewis and Clark Community College (LCCC), in Illinois.

With a student population of about 12,000, LCCC is an institution that understands the importance of retention as a continuous process. And in addition to being proactive, they collect and analyze data to know which at-risk students to help.

## Student Retention Data: The First Steps

It all started with a clipboard. Back before LCCC had even adopted Blackboard Analytics, Krieb began collecting offline data by investigating the retention rates of students who attended tutoring in LCCC’s library, compared to those who did not.

“I began tracking students who used tutoring and then taking those students’ IDs and matching them with enrollments, to see if there was data to support that tutoring was actually helping with retention,” Krieb explains.

These first studies were based upon a theoretical framework designed by professor Vincent Tinto, called the student integration theory. Tinto’s assumption was that the more students connect with other people outside the classroom, the more likely they are to continue their studies.

Krieb’s research results confirmed his suspicion: students who were tutored presented higher retention rates than those who weren’t. As the study had not controlled other factors, it wasn’t perfect, but it was a first step.

## Predicting Student Success

In 2012, Krieb was asked to take on institutional research at LCCC. That’s when he was introduced to Blackboard Analytics, which allowed him to dig deeper into his studies, making sure that previous results weren’t just about tutored students being more motivated than others.

When Krieb started working on institutional research, one of his first initiatives was having Blackboard develop a method to track students as they reached for different support services around the campus.

“In other words, when students were tutored, or visited the diversity office, we got their ID, and then that information was sent to our data warehouse so that I could actually see this quickly in Blackboard,” Krieb explains.

That approach continued to evolve over the years. The tracking expanded to 20 different locations on campus, enabling Krieb to see the impact of the various student support services in student retention rates through correlational data.



“We can get very specific. For example, we can say that African-American males are an at-risk retention group for us, but we can also say that African-American males that used the library or that were tutored have a higher retention rate, so that allows us to target services for at-risk groups,” he notes.

LCCC is now sharing the data they have on retention with faculty, as they need instructors on board with the project. “We are trying to educate the faculty on data, on understanding this new data-driven culture. We are making them aware of student retention rates, at-risk groups and success rates. They obviously have a lot to offer, and they are responding well, but it is something new to them, for sure.”

Library Analytics: A Promising Field

Having been an academic library director for over 15 years, Krieb has found a way to combine both his backgrounds in libraries and in institutional research.

“My personal interest now is to get into library analytics, a very fertile field that hasn’t been touched yet. I think this is really important,” he says. But what does library analytics mean?

“Libraries have a lot of data and they serve every student on a campus,” Krieb notes. “But nobody can connect library

services to student success. So, what library analytics is about is connecting the impact of libraries upon student success using correlational data.” So, if students use the library to check out books or to ask a question to the reference desk, for example, what impact do those variables have on that student’s success?

That is a new field of research which, according to Krieb, is currently being explored by only two institutions: LCCC and the University of Minnesota.

“I’m working with a grant at Syracuse University on this very topic, it’s called Library Integration in Institutional Learning Analytics. It’s an Institute of Museum and Library Services (IMLS) grant and it’s about helping librarians understand how to find correlational data in their libraries,” he says. “Everybody is trying to find their correlational data, but libraries have not done this yet. So I think this is an exciting area to be.”

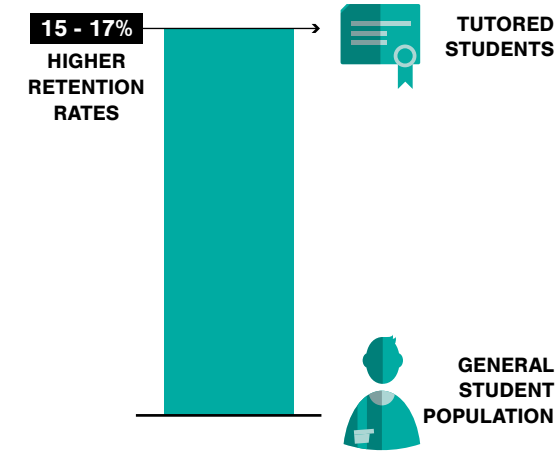
Learning from LCCC

- **Proactivity to help students:** When students abandon a course at LCCC, they fill out a survey telling the institution why they did it. According to Krieb, **there are three major reasons for student drop out: personal, academic, and financial issues.** “If it’s personal, whether be issues in their home, life or family, there’s not a lot we can do. But if it’s an academic reason, we can certainly help them with tutoring or academic support services, and if it’s financial, we can help them as well with emergency loan services.”
- **The “intrusive advising model”:** About two years ago, LCCC required all faculty to plan a graded assignment within the first few weeks of the semester. “Our semesters are 16 weeks

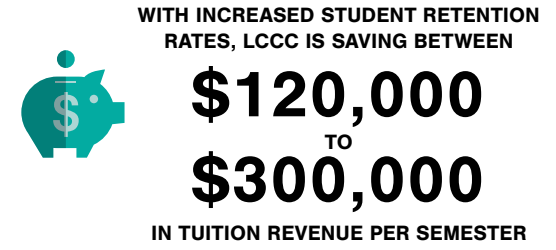
long, and we ask instructors to have some type of graded assignment by week four. That gives us an indication of whether the student is going to be in trouble in that course or not, because if we wait until the mid-term test as the first graded assignment, it may be too late,” Krieb explains. After that first assignment, faculty members must report through the student information system in case they have a concern for a student based upon either attendance or grade. “Our advisers then take the names of those possible at-risk students and reach out to them quickly to figure out what the problem is, so that there’s enough time in the semester to get them support so they won’t drop, or possibly fail, the course.”

- **Decentralized Student Success Centers:** At LCCC, there are several tutoring centers throughout the campus focused on different student needs, such as writing, math, speech or science. “Each student that goes to a Student Success Center has to check in with their ID and is asked about which course they are being tutored for,” says Krieb. This way, the institution can look up in the system the students that are tutored by location, and then see what happened to those students based on their grades and retention.

LCCC Retention Rates



LCCC Savings



4 Steps to Improving Student Retention

|   |  |   |   |
|---|--|---|---|
| <div>1</div> <div>USE DATA TO IDENTIFY YOUR TARGET GROUP</div> <div>If you don't know who to target, you won't know where to begin.</div> | <div>2</div> <div>FIGURE OUT WHAT WORKS TO GET THEM TO STAY</div> <div>Is it tutoring? Is it financial help? It depends on the reason why the student is inclined to abandon the course. There are three major reasons: Personal, academic or financial.</div> | <div>3</div> <div>PREDICT AT-RISK STUDENTS</div> <div>If students are displaying signs of struggle, be it through poor attendance or low grades, it's time to reach out to them to figure out what's happening.</div> | <div>4</div> <div>CONNECT AT-RISK STUDENTS TO SUPPORT SERVICES</div> <div>Make students aware of the types of help available on campus.</div> |
|---|--|---|---|

Lewis & Clark Community College developed an innovative way to analyze student retention rates, in relation to student support services around campus. By targeting at-risk groups, they were able to increase retention by offering students timely assistance.





# How a Predictive Model

## ENHANCED ULSTER UNIVERSITY'S APPROACH TO STUDENT RETENTION

Improving student satisfaction and retention is a long-standing purpose at Ulster University, Northern Ireland's civic university, with 27,000 students distributed across four locations in the region, within partnership campuses in London and Birmingham, and enrolled in fully online programs.

Andrew Jaffrey  
Head of the Office for Digital Learning at Ulster University

BY: PRISCILA ZIGUNOVAS  
BELFAST, UNITED KINGDOM

ULSTER IS THE FIRST INSTITUTION IN THE European Union to use Blackboard Predict, a solution that leverages data and advanced analytics to identify at-risk students.

The university has implemented a pilot project on predictive analytics in record time—less than a year. Through the application of a predictive model, this initiative allowed professors, instructors and student advisors to make early interventions when noticing the first signs of a struggle.

### Student Retention, an Ongoing Effort

At Ulster, student retention is not a new concern, but they have been adopting a more structured approach in recent years. The institution has historically been involved in a UK-wide higher education project published in 2013 called *What works?* Supported by the Paul Hamlyn Foundation, the initiative examined how higher education providers can improve student retention and success.

Ulster had a number of case studies aligned to that work, and some of the strategies that emerged from these were building engagement through partnerships between staff and students, promoting peer support and creating a sense of belonging, among others.

As a result, the university has taken a strategic, long-term, longitudinal approach to student retention, which from now on is going to be supplemented with real-time data-based decision making and interventions. This will be done through the application of predictive analytics, using a predictive model based on past student data to identify learners who are likely to have difficulties and drop out in the future.

“What we are doing is enhancing our approach with real-time, just-in-time data. We are very respectful that several areas of our institution have very well-designed intervention and retention strategies. However, we are seeing parts of the university that have much higher drop-out rates than we would like to see,” says Andrew Jaffrey, head of the Office for Digital Learning at Ulster University. **“What we are trying to do with Blackboard Predict is to provide a standardized platform and to encourage data-informed decision making and more timely intervention strategies.”**

### Project Development

This is not the first time that Ulster has used learning analytics to improve the learning experience. A previous work with descriptive and diagnostic analytics has allowed them to investigate the “what happened” and “why it happened,” as Jaffrey explains.

“We have looked at descriptive and diagnostic analytics to tell us how our learning management system was being used and how the different tools and technologies that support learning were being used,” he notes.

Until the day they were challenged by a new pro-vice-chancellor for education to think about adopting a more student-focused predictive approach. A project board was





then established, with wide representation from faculties across the university, but also from relevant internal stakeholders and professional services departments such as the student support department, IT services, the student administration and the quality management unit.

“One of the challenges with learning analytics projects is about project ownership and where in the university that project should be established. By bringing all those stakeholders into the project, we were able to have really valuable discussions,” Jaffrey points out.

From the moment they decided predictive analytics was the way to go, the project timeline developed rapidly. Ulster signed a pilot contract with Blackboard in summer 2017, with the expectation of going live within the first semester of 2018 academic year.

“A real motivation for the project was to better understand our data and to make sure that our assumptions about our data were accurate. So, a large part of the early work was around data and data cleansing, making sure that the data we were sending to the predictive model was accurate. That took a lot longer than we expected. But once we had got the data cleansed and in a good format, the predictive model was generated very quickly and we had it available and tested early in January of 2018,” explains Jaffrey.

From this moment on, they started the roll-out process and began raising awareness across the institution. The period from January to April was a time to discuss data ethics, governance and policy, as well as to promote adequate training for the professionals that were going to support the initiative. Only then the project was made institutionally available.

Challenges and Issues to Look Out For

One of the biggest challenges during implementation of the project, according to Jaffrey, was system integration. “We are working with Blackboard Predict, which is hosted within Amazon Web Services, and we had to set up specific system integrations that ensured that our data was going to be protected and in line with European Union legislation and law. That system

integration took a long time to set up technically. We had to establish secure transfer mechanisms to support the transfer of data between our data centers and Amazon Web Services,” Jaffrey notes.

In contrast, the agility in the developing and testing of the predictive model was a positive aspect of the project. “Because the Predictive model was based on 80% of the last four years of student data, 20% was held back for testing. We were able to run the model through that 20% of known outcomes and the model passed the test much more quickly than we expected.”

That meant that conversations accelerated quickly within the project team, because all of the sudden they had dashboards and a live model to demonstrate to stakeholders. As a result, discussions on ethics and guidelines for learning analytics policy development were reopened.

“Suddenly, dashboards became available, and that enhances conversations. At that point, we had a lot of engagement with our student union and student support around the ethical use of student data,” Jaffrey notes. **“We put a lot of thought into how dashboards would be perceived by students and the potential issues of**

*The first institution to adopt Blackboard Predict in the European Union is increasing student retention with predictive analytics combined with a longitudinal, long-term approach.*

**students being impacted negatively if they were seeing that they were performing poorly.** For example, we’ve had several discussions around the language that we would use in student support interventions to make sure that we are as inclusive and supportive as possible.”

The extent of the work that needed to be completed after the dashboards became available in the university’s controlled environment was something Jaffrey did not expect at the beginning of the project. The institution wanted to be reassured that the projections they were seeing were accurate and that they have had enough time to discuss and review them before making them available to students.

**“Quite often, the data shows us a narrow view of what’s going on in a student’s life.** I think that it’s really important to consider the human aspect. We are dealing with human beings, not a number, and we need to be respectful of that,” Jaffrey notes.

Anticipating the Future

At Ulster, the instructors within Blackboard Learn and the teaching staff who have responsibility for modules in the digital learning environment have full access to the analytics dashboard.

“They are very much involved with interventions and monitoring how their students are engaging with the material,” Jaffrey notes.

He explains that some areas of the institution have very well-defined student advisors, while others do not. “The decision we made was to give everybody who is teaching, anybody who is supporting a student, equal access to the predictive solution. We didn’t want to just have the solution locked down to those with a student advisory role. So, academic staff

have access to the dashboards, but so does any member of staff that is supporting a student throughout their journey at Ulster.”

When it comes to how to intervene when an at-risk student is identified, there’s no one-size-fits-all solution at the university. **“We see Blackboard Predict very much as something that starts a conversation with a student.** So academic colleagues are intervening in many different ways across the institution. We’re seeing the data modeling aspects and the predictive analytics as a way of starting that conversation and having that human contact,” Jaffrey explains.

That is a key point to understanding Ulster’s vision on learning analytics: **at the university, data is not seen as a definitive answer, but as a starting point.** They want to learn more about data and have more conversations about it. Some of these conversations, Jaffrey says, will certainly be challenging, but that’s a good thing.

“People have many different views and we think about a lot that’s happening in the media now, with Cambridge Analytics and Facebook, that really heightens people’s conversation around data ethics and privacy. And learning analytics sits on top of deeper layers of assumptions and beliefs that academic colleagues have,” Jaffrey explains. However, he thinks that’s a rich place to have conversations and to be respectful of people’s different views.

**“With any database project, we should recognize that data is imperfect and we must treat that data with humility, because it is only giving us a narrow picture and a narrow view of what’s going on with a human being,” says Jaffrey.** “And there’s lots of external factors going on with a student, well beyond anything that we can hope to measure within an institution. I think we all, as a sector, need to be respectful of that and treat data respectfully when we’re engaging with these sorts of projects.”

SOURCE

1. EU GDPR Portal. (n.d.). Key Changes with the General Data Protection Regulation. Retrieved April 28, 2018, from <https://www.eugdpr.org/key-changes.html>.



# Six Drop Out Causes and Solutions

TO KEEP HIGHER ED STUDENTS IN SCHOOL

Students are dropping out of college and it's a global problem that must be acknowledged with a stronger approach. Let's take a closer look at some of the main causes and solutions to keep students in university.



INFOGRAPHIC: TRiBU Studio

## WHAT IS CAUSING STUDENTS TO LEAVE HIGHER EDUCATION?

**1 HIGH COSTS**

With a constant rise in higher education costs, it is becoming harder for students to continue their studies, especially if they don't have financial assistance from their families.

**2 ISOLATION**

Students often find it difficult to reach out to faculty members for assistance with coursework, as well as channeling their newfound 'freedom' in the right way, as for most of them, it is the first time they experience being on their own. It can also lead them to social inadequacies that can bring them a step closer to leaving school.

**3 ACADEMIC DIFFICULTIES DUE TO UNCLEAR EXPECTATIONS**

Students often don't have a clear understanding regarding the institution's academic and behavioral expectations.

**4 CONCILIATION BETWEEN WORK AND STUDY**

Students that attend university on a part-time basis due to work obligations or other demands tend to leave school more often than those who attend full-time. It is common that part-time students fall behind due to time management and workload challenges.

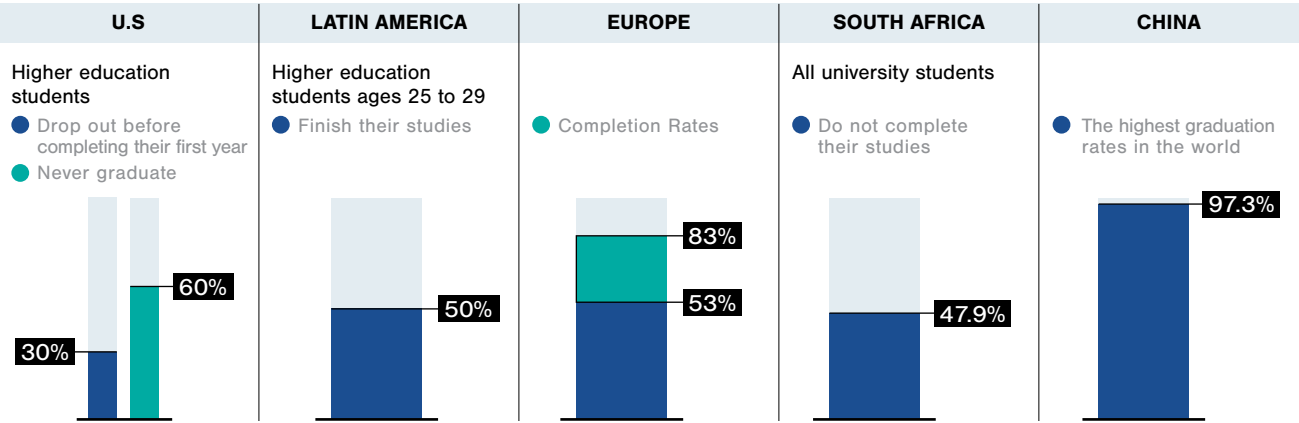
**5 LACK OF INTEREST IN COURSES**

Students who focus too much on requisite courses that do not interest them are more likely to drop out, rather than those who balance their subjects between required courses and electives.

**6 PSYCHOLOGICAL ISSUES**

Substance abuse, learning disabilities, attention/hyperactivity disorders, and autism-spectrum disorders are some of the most common psychological issues students face today.

Some Graduation and Drop out Rates Around the Globe

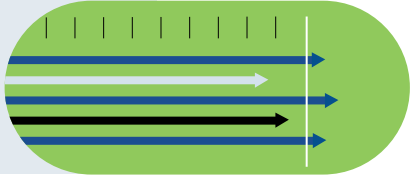


HOW INSTITUTIONS CAN KEEP STUDENTS ENROLLED

1 MORE EFFICIENT COLLEGES AND UNIVERSITIES

Practicing the Five Pillars of Online Learning Effectiveness helps develop and sustain online learning programs,

including: faculty satisfaction, student satisfaction, learning effectiveness, scale, and access.



2 HABITS FOR SUCCESS

Make campus resources available to students through convocation, orientation and first-year seminars. Ensure they are aware

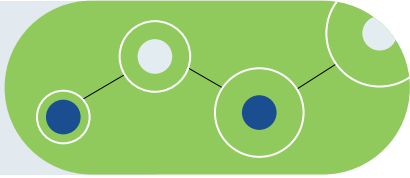
of the GPA needed to maintain their status and the activities they must be involved to become an integral part of the university.



3 BIG GOALS, SMALL STEPS

Define goals and break them down by program, courses and department. That is the ideal path for universities

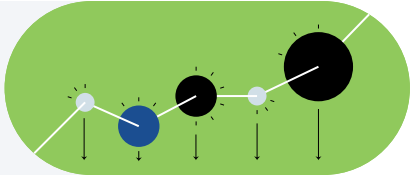
to develop effective ways to encompass the entire institution in reaching those goals.



4 DATA COLLECTION

In order to effectively address student retention, universities should gather information on program effectiveness, student achievement, and resource allocation, as well as

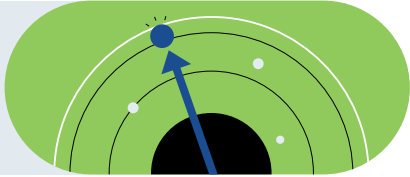
understanding the characteristics and behaviors of students who are likely to fail. This is the sort of data that can enhance student retention efforts in a more insightful way.



5 INTERVENTION PROGRAMS

Reach out to at-risk students before they leave the university. Learning analytics solutions are a great way to

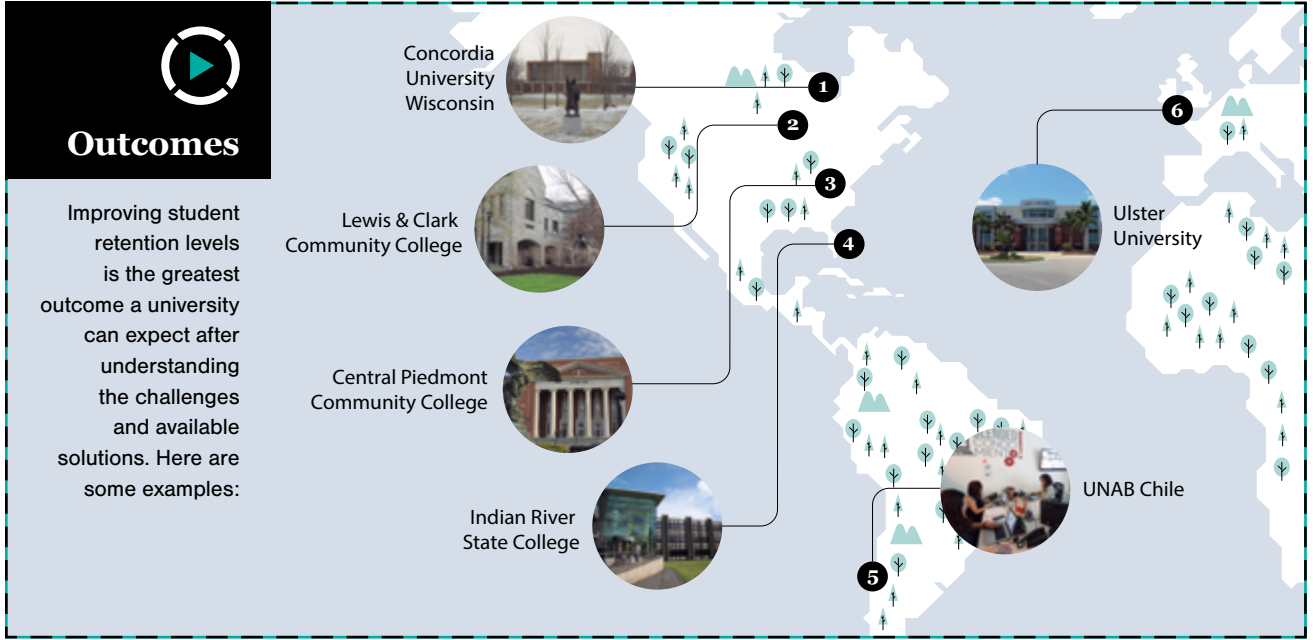
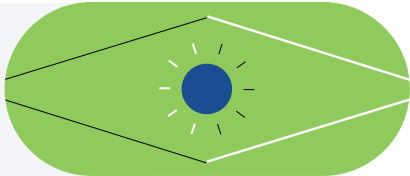
find students who are experiencing academic, personal, financial or social challenges and offer timely help.



6 STUDENT SUCCESS GOALS

When a university establishes a shared vision of student success, it becomes easier for students to understand what is expected of them and move

forward to achieve it. At the same time, it also allows the institution to allocate and organize resources to support them in their journey.



1

Record retention rate

After using learning analytics solutions, Concordia University–Wisconsin found out they needed to improve the relationships between faculty and students, as well as how to better support students with mental health needs. **Their retention rate increased from 72% to 82% in one year only.**

2

Improving retention with analytics

At Lewis & Clark Community College, there was a **17% improvement** in student retention with the use of learning analytics tools.

3

Increased course completion and term-to-term retention rates

Through the use of analytics, Central Piedmont Community College (CPCC) was able to increase course completion rates from **65% to 72%** and term-to-term retention rates from **69% to 83%**.

4

Online enrollment growth

At Indian River State College, online program enrollments **grew by 56% between 2014 and 2016**, due to insights gathered from learning analytics tools.

5

Low dropout rate

At UNAB Chile, the development of a Comprehensive Support Model has drastically increased student retention. **Their current dropout rate is between 3% to 4% only.**

6

Early interventions

Through the application of a predictive model, professors, instructors and student advisors at Ulster University were able to make early interventions at the first signs of student struggle.

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Hans Beldhuis  
Program and Change  
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THREE STORIES ON  
LEARNING ANALYTICS SHOW

# How Far Institutions Can Go With Data

“The purpose of learning analytics is the strategic application of the data toward the goals education institutions have,” says Rachel Scherer, director of analytics at Blackboard. Explore three learning analytics stories from Australia, Canada and the Netherlands for a better understanding of how learning analytics can impact colleges and universities and help them achieve their strategic goals.

BY: LEONARDO TISSOT

GRONINGEN, NETHERLANDS

ALBURY, NEW SOUTH WALES, AUSTRALIA

WINDSOR, ONTARIO, CANADA

## Charles Sturt University: Using Learning Analytics to Share Information at Scale

When Charles Sturt University (CSU), in Australia, began using Blackboard Analytics for Learn, they had a singular goal: empower faculty to see how students were engaging (or not) when studying online. This was a critical

matter for faculty, especially when considering that no less than 25,570 of CSU’s 43,140 students are online learners.

“Just as in a classroom a teacher can see who is present, who is engaging and who is staring out the window, we wanted our faculty to be able to get the same information from Blackboard Analytics for Learn,” says Ian Holder, adaptive learning and teaching analyst at Charles Sturt University.

In order to do that, CSU’s Learning & Teaching (L&T) specialists implemented three of the standard reports available from Blackboard Analytics for Learn – Course at a Glance, Activity and Grade Scatter Plot, and Activity Matrix – as well as a customized report in use at another Australian university,

Content Access Statistics, which shows statistical information on student course content usage in the learning environment.

Additionally, CSU created charts and visualizations of blog and discussion forum activity in courses. “Discussion forums are an area of increasing interest that we hope to continue to work on and enhance our reporting in,” says Holder.

## A Few Outcomes of Learning Analytics Implementation at CSU

Learning analytics helps institutions gather evidence and then leverage this information for decision-making. Today, CSU is still at a stage where learning analytics are focused

at the individual course level. In the future, they aim to bring in additional data sets (such as demographics, course survey results) and look across colleges or the university as a whole to make bigger decisions. That said, CSU has achieved some early results.

**“One such outcome, across departments, is instructional designers using their dashboard to review Blackboard course site structure and student engagement within this structure,” Holder explains. “The structures of the course sites were reviewed to ensure a**



*reasonable amount of content and the appropriate number of folders and folder depth. Student engagement was also compared to the course and course site design to determine if students were engaging as and when expected, and if required, changes were implemented,” he adds.*

Instructional designers leveraged course analytics to inform course site redesign resulting in better access to content and improved engagement through optional tests and discussion forums. “We rejoice in this success, but course site design and the actual content and tools in the course site both change regularly, so we see it as a continuous improvement process,” Holder points out.

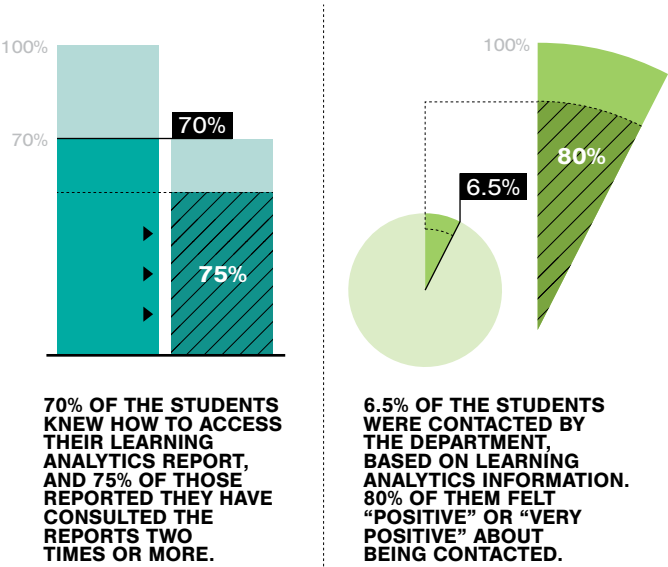
Leveraging learning analytics data, CSU’s College of Science proactively reached out to students who had not yet accessed their course site before the census date – the last date to withdraw without penalty. As a result, a number of students withdrew, saving them time and money by dropping out of courses for which they may not be suited. **According to Holder, between 30% and 46% of students in the campaign withdrew before census date in the subjects piloted.**

CSU aggregates learning analytics data across multiple courses to enhance their knowledge, challenge their thinking, and to stimulate conversation regarding educational technology in a project they call “The Pulse.” This information is now shared publicly through an infographic on Learning Analytics that is published three times a year.

In the future, Holder foresees artificial intelligence and increased data visualization taking a much larger role in learning analytics. “For many tasks, we currently need to extract the data out and process it through some other tool: I see in the short term these will increasingly become embedded in the learning analytics tools themselves. As will the areas of cognitive computing and natural language analytics,” he believes.

***For CSU in particular, Holder believes learning analytics will become more popular among faculty over time, considering it still remains a niche area. “As learning analytics becomes easier to use, more powerful, and increasingly customizable***

Outcomes of Learning Analytics Usage at Groningen



*Learning analytics helps institutions gather evidence and then leverage this information for decision-making.*

PHOTOS: AFP William Philpott



***to individual needs, the future seems to be one where more staff will take up the opportunities provided by it to reflect on their teaching and to provide personalized support to students. This engagement, we hope, will lead to more and better actions towards students to improve both their learning and success,” Holder concludes.***

**Identifying Students at Risk:  
How the University of Groningen  
Began Using Learning Analytics**

When the University of Groningen – a traditional 400-year-old educational institution

located in the Netherlands – decided to use Blackboard Analytics for Learn, they had a clear vision in mind. For the Dutch institution, learning analytics offered opportunity to identify at-risk students at an early stage in their studies.

Currently at Groningen, the student advisor usually waits for the first exam results – normally at least 10 weeks after classes have started – before reaching out to students and offer support. “We feel that it takes too long to ensure a good start of their studies,” says Hans Beldhuis, program and change manager of Educational Innovation and Strategy at the University of Groningen.

For their pilot program with Blackboard Analytics for Learn, the university decided to change the approach



by using login exceptions, minutes spent in the LMS, and grades in the Grade Center to identify at-risk students during the first three weeks of any given course. Both grades and login exceptions proved to be good measurements for identifying at-risk students.

*However, at this moment, their goal was not yet achieved for all courses. Beldhuis believes learning analytics has to be fed with valid information before one can draw some kind of conclusion on the “numbers,” and faculty need to be aware of that. “The course needs to contain intermediate tests in its early stages and the grading should be incorporated in the grade book,” explains Beldhuis. If instructors fail to meet these demands, Learning Analytics are less effective.*

The Ethics of Reaching Out to At-Risk Students

At Groningen, the university is not only concerned about providing at-risk students with the right support but also to ensure their identities are not available to everyone on campus—Privacy issues, in particular, are of high importance in Europe due to a new General Data Protection Regulation (GDPR) legislation put in place in May 2018.

*Analytics tools help institutions know more about their students' performance, improve course design, and achieve or enhance accreditation outcomes, among other benefits.*

“We do not think that a professor needs to know at what time students logged on to the system. For faculty, it would be sufficient to see, on a group level, how many students have logged on in a certain time period. In class, the professor can refer to that number and the students might draw their own conclusion on what actions to take,” points out Jan Tjeerd Groenewoud, project lead EWS at the University of Groningen.

“Having said that, it is true that a professor’s general remarks on the engagement of the group as a whole has far less impact than very specific, private feedback to individual students. The protection of privacy can be a higher priority than the efficacy of occasional professor-student feedback,” Groenewoud admits.

Although the university has not been able to measure and analyze project outcomes so far, a qualitative analysis was performed through questionnaires. Students were asked to reflect on their opinion on the personal course report and to share their comfort level with being contacted by the department based on learning analytics, and the results were promising.

Building Curriculum Maps with Learning Analytics at the University of Windsor

About a year ago, the University of Windsor, in Canada, build a series of curriculum maps leveraging Blackboard Learning goals and alignments as well as Analytics for Learn (A4L).

Curriculum maps are a way to visualize and analyze the structure of a program for both summative program reporting and formative planning and enhancement. They illustrate

how individual courses work together to support student success in achieving outcomes, providing information that is very useful for improving both program and course design.

University of Windsor had three goals in mind when they decided to give learning analytics a try: (1) to inform program review; (2) to facilitate accreditation reporting, demonstrating where and how frequently outcomes are being assessed throughout the programs; and (3) to chart student performance with respect to specific learning outcomes throughout a program. “Although we have been doing all of these things for years, the work was manual,” remembers Allyson Skene, a teaching & learning specialist at the University of Windsor.

Their first experience was a pilot at the university’s Faculty of Engineering. Work that was traditionally done by sifting through course syllabi, analyzing course grades, re-assessing achievement in assignment artifacts gleaned from various stages in student degree programs, and then documenting and analyzing all this information on spreadsheets was streamlined. Canadian Engineering Accreditation Board (CEAB) outcomes were aligned to specific assignments or grade center columns in Blackboard, and the information was pulled into a series of reports in A4L.

*“A4L is the University of Windsor’s first learning analytics solution and one of the main goals in purchasing it was to automate at least parts of what has long been an arduous and time-consuming task,” says Skene.*

The pilot was a success as the resulting reports were consistent with CEAB

reporting requirements and able to illustrate where and how frequently students were being assessed, as well as their performance on key outcomes.

The Future of Learning Analytics: Customers Speak

“Blackboard Analytics for Learn has given us the capability to answer many faculty questions, and to provide them the evidence they require before making decisions. Whether it is seeing who has logged on or how many times they have logged on to the course site through the Course at a Glance report, or seeing which students have posted to discussion forums through a dashboard (rather than having to go through each forum and count!), faculty now have powerful analytics they can apply to their course and their course site’s specific structure.”

Ian Holder, Adaptive Learning and Teaching Analyst, Learning Technologies Unit, Division of Learning and Teaching at Charles Sturt University

“Teachers could benefit from learning analytics if they see it as their role to warn students about procrastinating behavior, based on group level log-in information. Learning analytics could play a role in selecting and inviting low achievers, based on intermediate testing. With analytics, we could also support the management to identify courses that need attention from the instructor, together with instructional designers, assessment experts and others.”

Hans Beldhuis, Program and Change Manager Educational Innovation and Strategy at the University of Groningen

“We are currently working on integrating other data sources into the A4L platform, with the hopes of being able to generate more robust reporting that doesn't rely exclusively on that mined from the LMS.

Allyson Skene, Teaching & Learning Specialist at the University of Windsor



# What Instructor and Student Behavior Can Tell Us

## ABOUT THE BEST TEACHING AND LEARNING STRATEGIES

The depth of adoption of educational technologies, combined with new approaches to data storage and analytics, have created a whole new body of research possibilities. Is your institution using these insights to help students?

BY: PRISCILA ZIGUNOVAS

DAVIS, CALIF., UNITED STATES

DO STUDENTS NOT UNDERSTAND LEARNING MATERIALS OR ARE they not spending enough time on them? What study practices and other behaviors make students successful and which indicate they are likely to fail? What can instructors do to encourage positive student behavior? Finally, how can instructors design their courses and materials in a way that fosters learner engagement?

These are some of the questions that educational research is trying to answer based on investigating instructor and student behavior.

The term 'behavioral science' is used in reference to multiple disciplines dealing primarily with human action,<sup>1</sup> generally concentrating on the patterns of response to external stimuli,<sup>2</sup> in contrast to asking people their opinions and positions; It looks more at what people do in live situations.

**In education, behavioral science is being used to understand which student and instructor behaviors are the most successful, to design better learning**

**materials, to improve curriculum and to determine which teaching strategies and approaches institutions should adopt.**

At Blackboard, Dr. John Whitmer, learning analytics and research director, investigates what people actually do when using educational technologies, as opposed to conventional research, which is usually based on surveys or small-scale interviews.

Whitmer's team investigates how individuals use Blackboard's digital learning environment, including tools and resources like Blackboard Learn, Collaborate, Ally and SafeAssign, and analyze how the results are related to student achievement.

"The data collected and the new techniques we are developing through learning analytics provide the ability to understand student

**John Whitmer**  
Learning Analytics  
and Research Director  
at Blackboard

PHOTO: AFP William Philpott







interaction with learning materials, and then use that to identify engaged versus disengaged students to a scale and a degree that was not previously possible,” says Whitmer.

He is seeing more and more instructors and institutions beginning to take advantage of these new opportunities. “It’s really exciting. We want to make sure that we identify what is truly engaging and that we reflect and represent the best qualities of education through this work. That’s something we are increasingly able to do,” says Whitmer.

## Behavioral Science and Educational Research

Learning analytics has opened up a whole field of research that wasn’t available before. **New educational technologies now make it possible to record students’ actions at a highly detailed level, which can be helpful to answer several questions regarding student behavior and learning.** Qualitative research and quantitative linguistics are also being applied as a way for instructors to obtain deeper insights into the quality and originality of student work and interactions.

### 1. *First Application: Understanding the Relationship Between Student Behavior and Student Success*

**Behavioral science is being used today at multiple levels, according to Whitmer, but mostly to look at student behavior and then make comparisons between how students interact and use technologies, and the behavior of students who are successful compared to those who are not.**

“By doing this, it is possible to create predictive models that indicate students who are likely to be successful or not successful, and provide that information in advance to teachers, advisers, and perhaps to students themselves, so that there’s enough time to do something about it,” says Whitmer.

It also allows instructors to identify whether their courses were designed effectively. For example, if students are

*The use of behavioral science in educational research is helping institutions to understand what makes a successful student.*

spending a large amount of time on one learning resource, does that mean they are learning a lot from it or that they are struggling?

“Looking at the relationship between usage and student success, you can also learn how to improve the course materials themselves, so that all students learn better and struggle less,” says Whitmer.

### 2. *Second Application: Understanding How Different Materials and Approaches Influence Learning*

A second application to behavioral science in education is that institutions are now able to make comparisons between different materials or different approaches in order to have evidence behind the educational strategies they adopt.

“For example, you can provide a specific material in a video format, then in a text format, and see how that relates to both the amount of time students spend on it, as well as how effectively they learn,” explains Whitmer.

### 3. *Third Application: Improving Curriculum*

Finally, the third application of behavioral science, more closely related to engagement

analytics, is improving curriculum. Looking at how students succeed, don’t succeed, interact, and the degree to which they interact with materials, and then establishing which paths through curriculum **are optimal.**

“Helping students complete their degree is a major challenge in the United States and in developing countries as well. It’s important that students graduate as easily as possible and that we remove as many of the barriers as we can, and behavioral science can really help determine the best pathways for students to take,” Whitmer explains.

## Instructor Behavior

What behaviors are the most important in quality teaching? **Reviewing student work and providing frequent, high level feedback is probably the strongest way in which instructors can impact student learning,** according to Whitmer.

That can be a challenge for instructors with increasingly larger classes and less time, but there are technological resources that can help.

**“One of the things that we are trying to do at Blackboard is increase the time instructors have to provide meaningful feedback, by automating many of the things that take their time right now; For example, counting discussion forums posts and giving students a participation grade in the forums. That’s not a good use of instructor time, it would be better if they were spending their time reading, reviewing, replying student work, and giving a higher level of feedback,”** Whitmer explains.

Blackboard is also developing automated feedback mechanisms and instrumentations in Blackboard Learn so that instructors can see whether students are reading their feedback or not.

Another instructor behavior that impacts learning is being present in the online environment by logging in and contacting students frequently. “That sense of instructor presence is very strong and important, and that’s a way in which instructors can immediately have an effect on learning, by showing that they care and that they are concerned about students. If the students know their instructor is online, is watching, and is paying attention to their participation, that gives students a sense that the instructor cares about them, and as a result, that they have a connection and a greater motivation to participate in the class as well,” says Whitmer.

In a broader sense, teaching to students’ abilities, creating effective learning materials and evaluating those materials frequently are other instructor behaviors that are encouraged.

## Student Behavior

Is there such thing as an ideal student behavior? According to Whitmer, that’s hard to determine, and we must keep in mind that behavior varies depending on the student background, prior knowledge, and experience.

If the student has already mastered the material, or has an extensive background on the subject, measuring behavior may not be a very good indicator because perhaps that student doesn’t need to spend a lot of time studying.

“But as a general principle, we know that accessing materials early and often is better than accessing materials infrequently and late. This reduces the load and helps students learn more over time,” Whitmer explains.

Interactions among students are also important student behaviors. According to Whitmer, **feeling that what you are doing matters and that you are a part of a learning community is often very motivating to students.**



“Especially for online learning, to have degrees of engagement, connection, and interaction with other students and instructors is important to have a sense of the student social presence in the online environment,” says Whitmer.

Prioritization and time management are also essential behaviors for student success. Technology can lend a hand to students in that matter: **Blackboard Learn with the Ultra has an activity stream that provides a prioritization of upcoming tasks and feedback to students so they have to do less of that on their own.**

Engaged Versus Disengaged Behavior

There are many ways for students to be engaged and disengaged, according to Whitmer. The time and frequency in which they access the course may be good indicators, but behavioral patterns vary.

“For example, if a student does not log in to an online class and does not access the class materials in the first few weeks, it is likely that he or she is disengaged and will not do well in the class. However, a student who logs in early, gets the materials and then does not log in again until it is time for the test may be disengaged as well,” says Whitmer.

Another way of assessing engagement is to look at what students are doing in the digital learning environment: Are they performing active or passive activities? “Are students reading other people’s posts, looking at someone’s profile or opening a file? Or are they submitting a homework assignment, doing a practice test, writing a blog post or an email to their instructor?” Whitmer questions.

This distinction may be essential for the instructor to understand whether learners are engaged in a way that is productive in their learning or not.

Finally, Whitmer notes that it’s important to distinguish interactions from engagement. For example, the act of a student opening a file is an interaction, but to be engaged implies that the student is having a positive experience.

“You can interact with something a whole bunch of times and not necessarily like it. If you don’t like it, that’s not engaged,” says Whitmer. “We need to move beyond just counting clicks to have a better understanding of the depth of the student experience, and that’s why it’s really important to take multiple methods into account and to look at them with an open eye.”

How to Design a Course that Fosters Engagement and Positive Student Behavior

- **Provide frequent assessments:** Boosts engagement and allows the instructor to identify students who are disengaged as early as possible.
- **Divide materials into smaller pieces:** Makes it easier for students to move forward as they feel a sense of progress.
- **Apply Universal Design for Learning (UDL):** Makes the course accessible and interesting to students with all abilities.
- **Answer student questions and clarify information online:** Encourages interactions and helps students perceive the course as truly useful.
- **Make your expectations clear:** Allows students to know the degree and frequency in which they are expected to interact in an online course.
- **Provide feedback mechanisms:** Lets students know how they’re doing and whether they’re on track.
- **Encourage experimentation:** Helps students develop a growth mindset knowing that it is okay to learn from their mistakes.



ILLUSTRATION: TRIIBU Studio

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KEEPING  
STUDENTS ENGAGED:

# the Role of Faculty in Student Retention

PHOTO: AFP Rod Sanford

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Student retention and student success are important areas of focus for educational institutions today. With the rising costs of higher education and the value of employability after graduation, student retention plays a strategic role in our institutional vision and mission.

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## THE CHALLENGE OF IMPROVING STUDENT SUCCESS

and retention is multifaceted and involves all areas at a higher education institution. At Grand Valley State University (GVSU), an institution with 25,000 students and an average class size of 26, this is the primary focus.

Teachers, professors and instructors engage directly at the course level. **It is key that faculty do what they can to personalize and humanize their courses by providing engagement through instructor presence.**

At GVSU, a photo roster integrated into Blackboard Learn helps faculty learn student names. This enables faculty to focus their attention on best practices for engaging students in first-year undergraduate courses. Having faculty 'know you' as a student and not treat you like a number

is an important aspect of the college experience, vital to student success and retention.

Faculty that are approachable, know students by name, and have invited learners to come talk to them and ask questions go a long way in building an effective faculty-student relationship. Providing students with a good overall college experience is helpful and tactics that seem small carry a lot of weight.

Having grades posted right away, informing students of what they need to do to pass the class, and helping them understand all they need to be successful creates a supportive environment for learning. Encouraging students and believing in them builds rapport. Faculty that approach students with pedagogy that has a coach, mentor, and facilitator of learning ground work helps to ensure student success.

Kim Kenward, Instructional Designer, eLearning and Emerging Technologies, underscores the point of the faculty-student relationship:

"One of the most significant factors influencing student retention in a course is whether students feel they belong to a larger community. It's imperative that instructors design opportunities and assignments that ensure a student does not feel isolated. When students are given the opportunity to work with each other through activities such as written or video discussions, peer reviews, and group assignments, they are more likely to feel part of a community, become engaged with the course content, and stay enrolled in the course."

Ultimately, it's helpful to remember the 'big picture' among the details. Focusing on the pedagogy and the art of facilitation is key to teaching. Instructors that are engaged with their students provide an extra boost that is often needed by students.

"Keeping students engaged and involved is the job. Losing students from the class is not the end of the world, but keeping them moving forward is the responsibility of the whole village. We are not just grading papers or assignments, we are creating the basis of sound citizenship in a community, our community. That's on all of us."

**Adrienne Wallace,**  
Instructor,  
GVSU School of  
Communications,  
Ad/PR Major

## Reasons Why Students Drop Out of School

Students have many activities happening in their lives, and depending on their circumstances, college may not be their priority. Medical challenges, family dynamics, and their overall well-being is part of the picture. Simply stated, college is a lot of work – learning is a lot of work. Students can often take too many classes and sometimes they may need to drop one class to have time to focus on another one. Students may be working full time while trying to go to school full time. Students may leave a course because they are failing the class.

In short, students may leave courses for a variety of reasons. Their lives are complex, busy, and there are many life factors. This is why proper student orientations and robust student services are key. Students may just need that one support service that encourages and enables them to continue with their education. **Faculty have a unique role in the engagement and connection with students.** Often what is needed is a 'life line' and a feeling of genuine care for their personal well-being and that the student, their peers and the instructor are all part of a community of learners.

Students also need help in ensuring they place their priorities in the right place. Downtime and free time are important, but spending too much time on "extra-curricular" activities such as video games takes them away from the needed cognitive time to process their course material.



“I try to let them know we are all in this together. If something is traditionally difficult for students, I just lay it out there. Then I can give them tips to make it easier if we just identify together the difficulties. It can always be a conversation.”

## How Faculty Can Support Student Success

Without the student’s own investment, they are at risk of failure. After all, learning is a personal activity. While this is in fact where the rubber meets the road, there are aspects of the faculty role that can contribute and support student success and retention.

It may go without saying, but it’s helpful for faculty to monitor their students. Not in an overbearing way, but to offer coaching and mentoring. It is often helpful to simply ‘check-in’ with students, asking “What’s on your mind?”, “I didn’t see you in class, is everything OK?” or saying, “I noticed you haven’t accessed Blackboard in a couple of weeks, I posted your grades and feedback, let me know if you have any questions and hang in there!”

Student feedback is arguably the most important aspect. Timely grading assignments and immediately posting the results and instructor comments is key. Students frequently ask their instructors to use the assessment and grading tools in the digital learning environment at greater levels. In fact, research has told us of the importance of grades to student success.

Put simply, after the first assessment, if a student is failing, he or she is already at risk. Faculty should identify those students that are struggling immediately. Having conversations is important too, as students often let you know that something is going on in their lives and then these students can be on your ‘radar.’

Szymon Machajewski, CIS Affiliate Professor in the School of Computing and Information Systems, underscores the value of reaching out to students proactively:



“Students who are likely to drop out miss assignments, lectures, and stop contributing in the course. All these progress indicators can be detected in the digital learning environment and at least followed up through the Grade Center email system.”

Faculty should use early alert systems - tools such as the Performance Dashboard and Retention Center in Blackboard Learn. Simple tactics such as emailing the student, asking them to your office or staying after class, and overall encouraging them and reaching out to them can contribute to student retention.

Meeting students one-on-one and face-to-face provides an aspect of genuine care above and beyond a ‘general email.’ It’s about caring for students and showing that you are concerned and want them to know that you are there for them as a faculty member.

Adrienne Wallace employs a variety of strategies to engage with students while providing an important context for the role of the instructor in supporting student retention:

“I have a few tips I rely on: knowing the names of all students AND making time for/allowing the students to build their classroom network immediately. I know we would all like to think that students come to class for our sparkling personality and knowledge base, but the reality is that they are accountable to their peers more than they are to you. If they have friends in the class, they will come. If they feel confident in their work, they will come. If they like the environment you have created in your classroom, they will come. If you email them when they miss class to check on them, they will come. If you show you understand them, they will come. If they do not come to class, you need to take a hard look at how you interact with your students.”

## Technology, a Valuable Resource to Improve Student Retention

Large class sizes make it even more important to leverage technology to share course materials, communicate with students, and provide assessment and grading feedback. Students in large courses can often feel isolated. Personal connections and building a supportive learning community are critical to student success and retention.

There is a plethora of tools you can use pedagogically to connect with students. Using technology, faculty can engage with students in unique ways, provide creative assignment feedback, and bring in a new level of instructor persona using lightboard videos.

One tip for faculty teaching large classes is to reach out to their campus eLearning support

team. From digital media developers to instructional designers, your campus staff can support you as a faculty member. At GVSU, the eLearning team has assembled a series of video tips called “Tech Bytes” that provide a variety of unique approaches to the implementation of technology in teaching.

For large classes, placing course materials online, creating lightboard videos, and using student response systems are helpful in engaging students. Further, moving toward a flipped or active learning instructional model can provide an enhanced pedagogical approach that creates a highly interactive environment for students. **Not using the entire class period for lecturing can free up valuable in person time in class for the personalized and customized learning needs of students.**

Szymon Machajewski shares the value of technology in large classes:

“Technology, such as Blackboard Learn, Pearson MyLab IT, and others, scale across large enrollment courses. They help instructors track student progress and represent electronic evidence of student activity. With this evidence, the Blackboard Retention Center can process large sets of data to help identify specific individuals and their needs early in the semester.”

**Using an early alert system or the Performance Dashboard or Retention Center in Blackboard Learn can save time while also redirecting focus to those students who need an extra ‘high touch’ connection.** In addition, communication tools such as announcements, discussion boards, journal, and live chat ensure that students can reach out to the instructor and the instructor can effectively and efficiently inform students while building a valuable rapport.

Because of individual learning differences, dedicating time to supporting good Universal Design for Learning enables course materials to be more personalized. In “Universal Design for Learning (UDL) is About Access,” Dr. Thomas J. Tobin discusses





the importance of UDL as a way to think about how we can make our courses proactively more engaging for students while ensuring our course content is providing flexibility and that all students can benefit.

“Social media has always been a natural extension of my classroom. PR people love to tweet and retweet. Additionally, using resources like Skype or Zoom for office hours on the STUDENT schedule, which sometimes means AFTER 9pm, or even a simple phone call meeting, shows you are willing to go the extra mile and open the communication lines. I have over 125 advisees in my program and three courses of students along with the responsibilities that come with advising a student group and a student-run PR firm. The schedule became not about me as soon as I said ‘yes’ and that is okay with me. Four to six office hours a week will not help that scenario I just laid out. So I have to be available in a more flexible way. As soon as I started letting students text me, my classes opened up more. They could ask me a ‘scary’ question and get an immediate response. I know immediacy isn’t for everyone, but I find that if I can squash an issue late at night they don’t stay up anxious all night long worrying and hating me — it’s actually a win and doesn’t take that much effort to help. Even an answer they don’t love hearing is better than not knowing all night. My deal with my students regarding evening communication is: if I can answer, I will. If I cannot it’s not personal... I might just be sleeping... I am over 40 after all. :)”

Finally, while not a solution for large class sizes, technology plays an increasingly important role in the delivery of high quality education that contributes to improving student outcomes. One of the challenges for students is the rising costs of higher education. An area that is promising is the use of open educational resources (OER) and open textbooks. We know that many students are unable to purchase textbooks and often make decisions at the beginning of the semester to wait to buy their textbooks. This prevents students from accessing the resources they need to be successful. With OER, this barrier is removed and students have access to their course materials on the first day of class, and further, they are able to better manage their

financial resources along the way. (For more information about OER, see: “Opportunities and Challenges of Open Education”).

In addition, as shown in a recent report in a study by Arizona State University, Research: Online Courses Associated with Improved Retention, Access, “online courses are associated with higher retention and graduation rates, increased access and cost savings of as much as 50%” **Flexible learning options meet student needs in providing opportunities for students to continue their progress toward their degree and educational attainment.** Therefore, it is important to align resources and to strategically position the support of faculty in the creation of online and hybrid courses at our institutions.

## Student Retention, a Responsibility of All

Student retention is a responsibility of the entire institution. Working together across the campus provides an opportunity for unique synergies in student services and support. Faculty benefit from technology and pedagogical assistance. Tips for creating active and personalized learning help to ensure that teaching is “humanized.” Taking advantage of tools such as early alert, the **Performance Dashboard or the Retention Center in Blackboard is valuable.** All in all, when talking to the students’ in person, there is tremendous value in hearing their stories and their struggles. Ultimately, if there isn’t a personal connection, students will feel isolated and will often not take advantage of campus support and services. Student services come alongside the instructor to provide another layer to reach each student individually.

Be sure to reach out to your campus’s eLearning support team, join a faculty learning community, participate in student orientation or move in day, learn about the student services that are available to students in your class – and let your students know!

## Our Experience With Retention at GVSU

As an educational institution, we are here for the students. Students and their stories help us to stay student-centered and help us move the needle in student retention. When faculty

focus on their instructor presence, and engage with students at the personal level, something magical happens. Often, students will then visit their instructor outside of class. Encouraging students to reach out, to ask for help, and being open to providing the help enables students to grow and learn. Willing students connecting with caring faculty makes students motivated as there is a personal connection – the instructor isn’t a stranger.

Adrienne Wallace shares the importance of being proactive and engaging with students:

“I would just say, don’t give up on a student because they stop coming to class. ‘Bug’ them every week. A short, ‘Hey, I noticed you weren’t around this week, are you okay?’ goes a long way to helping them come back. It’s important to be human. I think a lot of issues can be tackled by just treating a student like a student, not like a child or a subordinate. They are hungry for the responsibility, they just don’t quite know how to juggle it all sometimes, and that is part of growing.”

Connecting with students through quality courses and taking advantage of technology as a lever provides a thorough approach. Szymon Machajewski reinforces this:

“Our experience with Blackboard Learn in reaching out to students through email, announcements, and peer-instruction is a reflection of the Exemplary Course Program. Courses designed with the assistance of the ECP rubric help students interact with each other, with the course content, and with the instructor to promote engagement and retention.”

Beginning at the institutional level, retention starts before the students arrive on campus. The outreach and connections that are provided to prospective students and the consistent messaging across the student experience provides a foundational grounding for the campus and for the student. That is, their journey is about to begin and their path is one that allows them to explore new directions, find their niches, and develop skills for life and productive careers (as per GVSU’s vision statement).

Not to be overlooked, campus tours and ‘student welcome week activities’ play a role in connecting students to services and support. A component of student retention are those campus services that

*Using an early alert system or the Performance Dashboard or Retention Center in Blackboard Learn can save time while also redirecting focus to those students who need an extra ‘high touch’ connection.*

come alongside a student during their educational experience: library, tutoring, help desk, athletics, and student organizations can help freshman engage with the campus, meet other students and, overall, to engage at a deep level with the institution.

Finally, it’s important also to help students ‘begin with the end in mind.’ That is, they are entering their educational experience with the goal to graduate and start a career. Along those lines, institutions often employ incentives along the way. Grand Valley State University (GVSU) has a unique incentive (“The Grand Finish”) that provides a discount in tuition to encourage students to graduate and finish their educational journey strong. Further, ensuring students have access to degree planning tools provides crucial guidance to students. GVSU has a ‘myPath’ tool that is designed to assist students in preparing for and tracking their progress toward graduation. It encompasses both a degree analysis audit and an educational planner.

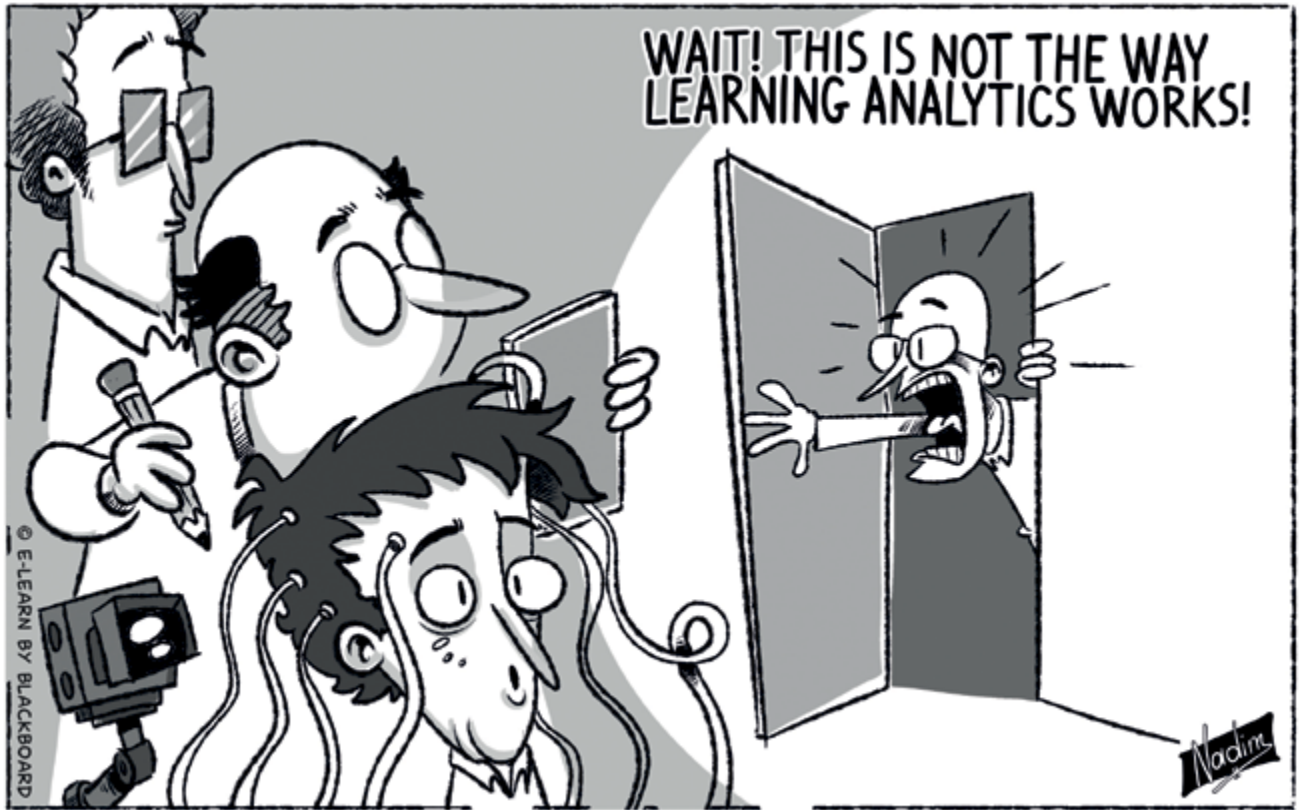
Ultimately, if we want to improve student retention and success, we need to be student-centered and align our resources strategically. To learn more about how institutions are focusing on students, see: “How to Teach a Student-Centered Class.”



LEARNING METHODS



DEMYSTIFYING LEARNING ANALYTICS



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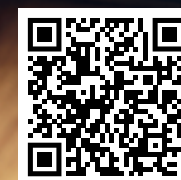


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## Andrew Jaffrey

Head of the Office for Digital Learning at Ulster University

“What we are trying to do with Blackboard Predict is to provide a standardized platform and to encourage data-informed decision making and more timely intervention strategies.”

## Heidi Pettyjohn

EIT Accessibility Coordinator at University of Cincinnati

“The biggest win Blackboard Ally gave us is that, in the process of fixing existing documents, faculty reported that they actually learned enough about accessibility that they’ve now begun to create new documents for courses to be accessible.”



## Eric Kunnen

Associate Director of eLearning and Emerging Technologies, Grand Valley State University

“Using an early alert system or the Performance Dashboard or Retention Center in Blackboard Learn can save time while also redirecting focus to those students who need an extra ‘high touch’ connection.”